코로나19 치료제 高인용 100대 핵심특허

□ 등록건으로 피인용도가 높은 특허 128건 선별

○ 2009년 이후의 특허로 인용문헌수(F1)가 최소 4건 이상인 특허를 선별하였음

연번	구분	화합물	항체	천연물	단백질	펩타이드	핵산	기타 바이오 의약품	페이지번호
1	공통기전 항바이러스제	16	6	0	0	1	4	1	2~26
2	유사종 바이러스 치료제	22	1	6	1	2	2	0	27~66
3	코로나19 기전 기반 치료제	3	0	3	0	1	0	0	67~72
4	증상 및 타겟 기반 치료제	24	3	18	4	1	3	6	73~116
합계		65	10	27	5	5	9	7	

1. 공통기전 항바이러스제

1-1 화합물

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	US8735345	12/713497	2010-02-26	Therapeutic composition	ROCHE
2	US8927576	13/259627	2010-04-06	HCV inhibitor and therapeutic agent combinations	PTC THERAPEUTICS, INC
3	US8026253	12/797308	2010-06-09	Quinoline inhibitors of HCV polymerase	ROCHE PALO ALTO
4	US8158631	12/822630	2010-06-24	Heterocyclic antiviral compounds	ROCHE PALO ALTO
5	KR10-1000351	10-2010-0115470	2010-11-19	고삼 추출물, 고삼 분획물, 이로부터 분리한 테로카판계 및 플라보노이드계 화합물 또는 이의 약학적으로 허용 가능한 염을 유효성분으로 함유하는 인플루엔자 바이러스 감염 질환의 예방 및 치료용 약학적 조성물	한국생명공학연구원
6	US8455516	13/006716	2011-01-14	HIV-1 fusion inhibitors and methods	TOURO UNIVERSITY
7	US8236779	13/014022	2011-01-26	Antiviral nucleosides	ROCHE PALO ALTO
8	CN102204914	2011-10077574	2011-03-30	Use of 4-alkyl-6-aryl-5-acetyl-1,3-thiazine for preparing neuraminidase inhibitor	HUNAN UNIV
9	KR10-1331167	10-2011-0085901	2011-08-26	신규한 오셀타미비르 유도체 및 그 제조방법	메디포럼제약
10	CN102964267	2011-10257557	2011-09-01	Cyclohexene compound having influenza virus neuraminidase inhibition activity, preparation method and application	SUN YAT-SEN UNIV
11	US8546389	13/278021	2011-10-20	Viral polymerase inhibitors	BIOTA SCIENT MANAGEMENT

▌ 코로나19 등 바이러스 감염성 질환 치료제 분야

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
12	CN103145608	2011-10402922	2011-12-07	Anti-enterovirus 71 (EV71) caprolactam compounds, and preparation method and application thereof	NANKAI UNIV
13	US8846896	13/793900	2013-03-11	Methods of preparing substituted nucleotide analogs	JOHNSON & JOHNSON GROUP
14	US8889701	14/051464	2013-10-11	Substituted (S)-(2R,3R,5R)-3-hydroxy-(5-pyrimidin-1-yl)tetrahydrofuran-2-ylmethyl aryl phosphoramidate	ALLA CHEM, LLC
15	US9511056	14/280478	2014-05-16	Antiviral compounds	GILEAD
16	US9475832	14/499865	2014-09-29	Phosphonates with reduced toxicity for treatment of viral infections	CALIFORNIA UNIV

☐ US8735345

Therapeutic composition			
문헌번호 (문헌일)	US8735345 (2014-05-27)	출원번호 (출원일)	12/713497 (2010-02-26)
출원인	ROCHE (CH)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	Embodiments disclosed in the present application relate to a composition that can include a hepatitis C viral polymerase inhibitor, or pharmaceutically acceptable salt or prodrug thereof and a hepatitis C viral protease inhibitor, or pharmaceutically acceptable salt or prodrug thereof. Additional embodiments disclosed relate to methods for treating a disease condition such as a hepatitis C virus infection, liver fibrosis and/or impaired liver function with a hepatitis C viral polymerase inhibitor, or pharmaceutically acceptable salt or prodrug thereof and a hepatitis C viral protease inhibitor, or pharmaceutically acceptable salt or prodrug thereof.		
대표청구항	1. A composition comprising a first compound, or a pharmaceutically acceptable salt thereof, wherein the first compound is [Image]and a second compound, or a pharmaceutically acceptable salt thereof, wherein the second compound is [Image]		

☐ US8927576

HCV inhibitor and therapeutic agent combinations			
문헌번호 (문헌일)	US8927576 (2015-01-06)	출원번호 (출원일)	13/259627 (2010-04-06)
출원인	PTC THERAPEUTICS, INC (US)	기술분류	protease inhibitors/화합물
요약	The present invention is directed to a combination product for treating or ameliorating hepatitis C virus (HCV) infection or disorders or symptoms associated therewith in a subject in need thereof comprising, a HCV inhibitor and one or more therapeutic agents selected from either or both a HCV protease inhibitor and one or more different therapeutic agents administered in combination in an effective amount to the subject.		
대표청구항	1. A combination product for treating or ameliorating HCV (hepatitis C virus) infection or disorders or symptoms associated therewith in a subject in need thereof comprising a HCV inhibitor selected from: [Image]		

	[Image] [Image]or an enantiomer, steroisomer, diastereomer, racemic, tautomeric, ester, solvate, hydrate, isotopologue or salt form thereofand an HCV protease inhibitor which is: N-(tert-butoxycarbonyl)-3-methyl-L-valyl-(4R)-N-{(1S,2R)-1-[(cyclopropylsulfonyl)carbamoyl]-2-ethenylcyclopropyl}-4-[(7-methoxy-2-phenylquinolin-4-yl)oxy]-L-prolinamide.

☐ US8026253

Quinoline inhibitors of HCV polymerase			
문헌번호 (문헌일)	US8026253 (2011-09-27)	출원번호 (출원일)	12/797308 (2010-06-09)
출원인	ROCHE PALO ALTO (US)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	Compounds having the formula I wherein wherein R1, R2, R3, R4, X1, X2, X3 and X4 and as defined herein are Hepatitis C virus NS5b polymerase inhibitors. Also disclosed are compositions and methods for treating an HCV infection and inhibiting HCV replication.		
대표청구항	1. A compound according to formula (I) wherein: [Image]X1 is N and X2, X3 and X4 are CR5;R1 is (a) a heteroaryl radical selected from the group consisting of pyridinyl, 2-oxo-1,2-dihydro-pyridin-3-yl, 3-oxo-3,4-dihydro-pyrazin-2-yl, 3-oxo-2,3-dihydro-pyridazin-4-yl, 2-oxo-1,2-dihydro-pyrimidin-4-one-5-yl, 6-oxo-1,6-dihydro-[1,2,4]triazin-5-yl, 2-oxo-2(H)-pyridin-1-yl, 6-oxo-6H-pyridazin-1-yl, 6-oxo-6H-pyrimidin-1-yl and 2-oxo-2H-pyrazin-1-yl said heteroaryl being optionally substituted by halogen, C1-6 alkyl, C1-3 haloalkyl, C1-6 hydroxyalkyl, C1-3 alkoxy-C1-3 alkyl C1-6 alkoxy, X6—(CH2)1-6CO2H or X6—(CH2)2-6NRgRh wherein X6 is O or NRg; or, (b) a heterocyclic radical selected from the group consisting of 2-oxo-tetrahydro-pyrimidin-1-yl, 2-oxo-imidazolidin-1-yl, 2-oxo-piperidin-1-yl, 2-oxo-pyrrolidin-1-yl, 2,4-dioxo-1,2,3,4-tetrahydro-pyrimidin-5-yl, 2,5-dioxo-imidazolidin-1-yl and 2,4-dioxo-tetrahydro-pyrimidin-1-yl;R2 is hydrogen, C1-6 alkoxy, C1-6 alkyl, C1-6 haloalkyl, C1-6 haloalkoxy or halogen;R3 is (a) aryl, (b) heteroaryl, (c) NRaRb, (d) halogen wherein said aryl or said heteroaryl are optionally independently substituted with one to three substitutents selected from the group consisting of hydroxy, C1-6 alkoxy, C1-6 alkyl, C1-6 hydroxyalkyl, halogen, (CH2)nNRcRd, cyano, C1-6 alkoxycarbonyl, carbamoyl, N-alkylcarbamoyl, N,N-dialkylcarbamoyl, (CH2)0-3CO2H, SO2NH2, C1-6 alkylsulfinyl and C1-6 alkylsulfonyl or (e) —X—[C(R6)2]2-6NReRf wherein X is O or NR7, R7 is hydrogen or C1-3 alkyl, R6 is independently in each occurrence hydrogen, C1-3 alkyl or two		

	R6 residues on the same carbon are C2-5 alkylene or two R6 residues on different carbons are C1-4 alkylene;Ra and Rb along with the nitrogen to which they are attached are a cyclic amine independently substituted by one to three groups independently selected from C1-6 alkyl, halogen or (CH2)nNReRf;Rc and Rd are independently hydrogen, C1-6 alkyl, C1-6 haloalkyl, C1-6 acyl, SO2R8 wherein R8 is (a) C1-6 alkyl, (b) C1-6 haloalkyl, (c) C3-7 cycloalkyl, (d) C3-7 cycloalkyl-C1-3 alkyl, (e) C1-6 alkoxy-C1-6 alkyl or (f) SO2[C(R9)2]0-6NRkRl, C1-3 alkylcarbamoyl or C1-3 dialkylcarbamoyl;Re and Rf, are independently hydrogen, C1-6 alkyl, C1-6 haloalkyl, C1-6 acyl, SO2R8 wherein R8 is (a) C1-6 alkyl, (b) C1-6 haloalkyl, (c) C3-7 cycloalkyl, (d) C3-7 cycloalkyl-C1-3 alkyl, (e) C1-6 alkoxy-C1-6 alkyl or (f) SO2[C(R9)2]0-6 NRkRl;Ri and Rj are (i) independently hydrogen, C1-3 alkyl or (CH2)2-6NRgRh or (ii) together with the nitrogen to which they are attached are (CH2)2X5(CH2)2,wherein X5 is O or NRk and Rk is hydrogen, C1-3 alkyl, C1-3 acyl or C1-3 alkylsulfonyl;R4 is hydrogen, CF3, CH2CF3, C3-5 cycloalkyl, halogen, C1-6 alkoxy, C1-3 haloalkoxy, CHR4aR4b or CR4aR4bR4c wherein (i) R4a, R4b and R4c are independently selected from C1-3 alkyl, CD3, C1-2 alkoxy, C1-2 fluoroalkyl, C1-3 hydroxyalkyl, cyano or hydroxy; or,(ii) when taken together, R4a and R4b together are C2-4 alkylene and R4c is hydrogen, C1-3 alkyl, C1-2 alkoxy, halogen, C1-3 hydroxyalkyl, cyano or C1-2 fluoroalkyl or R4a and R4b together with the carbon to which they are attached are 3-oxetanyl, or tetrahydrofuran-2-yl;R5 is independently in each occurrence hydrogen, halogen, C1-6 alkoxy, or C1-6 alkyl;R8, Rg and Rh are independently in each occurrence hydrogen or C1-3 alkyl;Rk and Rl are (i) independently in each occurrence hydrogen or C1-6 alkyl or (ii) together with the nitrogen to which they are attached Rk and Rl form a cyclic amine;n is independently in each occurrence zero, one, two or three; or,a pharmaceutically acceptable salt thereof.

□ US8158631

Heterocyclic antiviral compounds			
문헌번호 (문헌일)	US8158631 (2012-04-17)	출원번호 (출원일)	12/822630 (2010-06-24)
출원인	ROCHE PALO ALTO (US)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	Compounds having the formula I wherein R1, R2, R3, R4, and R5 are as defined herein are Hepatitis C virus NS5b polymerase inhibitors. Also disclosed are compositions and methods for treating an HCV infection and inhibiting HCV replication.		
대표청구항	1. A compound according to formula I wherein: [Image]R1 is 2-oxo-2H-pyrazin-1-yl-said 2-oxo-2H-pyrazin-1-yl moiety optionally independently substituted with one or two halogen or C1-3 alkyl substitutents;R2 is (a) —CR2a═CR2aAr, (b) —(C(R2b)2)nAr, (c) 1-oxo-1H-isochromen-7-yl or		

	2H-isoquinolin-1-one either optionally substituted by NRaRb, or, (d) benzooxazol-2-yl or benzothiazol-2-yl either optionally substituted by NRaRb;R2a is independently in each occurrence hydrogen, C1-3 alkyl, cyano, carboxyl or halogen;R2b is independently in each occurrence hydrogen or C1-3 alkyl, cyano, carboxyl, C1-3 hydroxyalkyl or C1-3 alkoxy-C1-3 alkyl;R3 is hydrogen, C1-6 alkoxy, C1-6 alkyl, C1-6 haloalkyl, C1-6 haloalkoxy or halogen or R3 and R4a together are CH2—O or (CH2)2 and together with atoms to which they are attached form a 2,3-dihydrobenzofuran or an indane;Ar is (a) aryl or (b) heteroaryl wherein said heteroaryl is pyridin-2-yl, pyridin-3-yl pyrazin-2-yl or pyridizin-3-yl and said aryl or said heteroaryl are optionally independently substituted with one to three substitutents selected from the group consisting of hydroxy, C1-6 alkoxy, C1-6 alkyl, C1-6 hydroxyalkyl, C1-3 alkoxy-C1-6 alkyl, halogen, (CH2)nNRaRb, cyano, C1-6 alkoxycarbonyl, carbamoyl, N-alkylcarbamoyl, N,N-dialkylcarbamoyl, (CH2)nCO2H, SO2NH2, C1-6 alkylsulfinyl and C1-6 alkylsulfonyl;Ra and Rb are independently hydrogen, C1-6 alkyl, C1-6 haloalkyl, C1-6 acyl, C1-6 alkylsulfonyl, C1-6 haloalkylsulfonyl, C3-7 cycloalkylsulfonyl, C3-7 cycloalkyl-C1-3 alkyl-sulfonyl, C1-6 alkoxy-C1-6 alkylsulfonyl, —SO2—NRcRd, C1-3 alkylcarbamoyl or C1-3 dialkylcarbamoyl;Rc and Rd are (i) independently hydrogen, C1-3 alkyl or (CH2)2-6NReRf or (ii) together with the nitrogen to which they are attached are (CH2)2X5(CH2)2 wherein X5 is O or NRi and Ri is hydrogen, C1-3 alkyl, C1-3 acyl or C1-3 alkylsulfonyl;Re and Rf are independently in each occurrence hydrogen or C1-3 alkyl;R4 is hydrogen, C1-6 alkyl, C1-6 haloalkyl, C3-5 cycloalkyl, halogen, C1-6 alkoxy, C1-3 haloalkoxy or CR4aR4bR4c wherein: (i) R4a, R4b and R4c are independently selected from C1-3 alkyl, C1-2 alkoxy, C1-2 fluoroalkyl, C1-3 hydroxyalkyl, cyano or hydroxy; or,(ii) when taken together, R4a and R4b together are C2-4 alkylene and R4c is hydrogen, C1-3 alkyl, C1-2 alkoxy, halogen, C1-3 hydroxyalkyl, cyano or C1-2 fluoroalkyl, or R4a and R4b together with the carbon to which they are attached are 3-oxetanyl, or tetrahydrofuran-2-yl; or,(iii) either R5 or R3 and R4a together are CH2—O or (CH2)2 and together with atoms to which they are attached form a 2,3-dihydro-benzofuran or an indane and R4b and R4c are C1-3 alkyl;R5 is hydrogen or halogen or R5 and R4a together are CH2—O or (CH2)2 and together with atoms to which they are attached form a 2,3-dihydrobenzofuran or an indane;n is independently in each occurrence zero to three; or,a pharmaceutically acceptable salt thereof.

□ KR10-1000351

고삼 추출물, 고삼 분획물, 이로부터 분리한 테로카판계 및 플라보노이드계 화합물 또는 이의 약학적으로 허용 가능한 염을 유효성분으로 함유하는 인플루엔자 바이러스 감염 질환의 예방 및 치료용 약학적 조성물			
문헌번호 (문헌일)	KR10-1000351 (2010-12-06)	출원번호 (출원일)	10-2010-0115470 (2010-11-19)
출원인	한국생명공학연구원 (KR)	기술분류	뉴라미니다아제 저해/화합물
요약	본 발명은 고삼(Sophora flavescens) 추출물, 이의 분획물, 이로부터 분리한 테로카판계 화합물 및 플라보노이드계 화합물 또는 이의 약학적으로 허용가능한 염을 유효성분으로 함유하는 인플루엔자 바이러스 감염 질환의 예방 및 치료용 약학적 조성물에 관한 것으로서, 특히 고삼 추출물로부터 분리되어진 화합물들은 뉴라미니데이즈에 대한 우수한 억제효과를 나타내므로, 본 발명에 따른 인플루엔자 바이러스 감염의 예방 및 치료용으로 또는 인플루엔자 소독용으로 유용하게 사용될 수 있다.		
대표청구항	하기 화학식 2로 표시되는 플라보노이드계 화합물 또는 이의 약학적으로 허용가능한 염을 유효성분으로 함유하는 인플루엔자 바이러스 감염 질환의 예방 및 치료용 약학적 조성물:[화학식 2] [이미지]여기서, R2는 [이미지]또는 [이미지]이고; R3및 R4는 독립적으로 메톡시 또는 히드록시이고; R5는 수소 또는 히드록시임.		

□ US8455516

HIV-1 fusion inhibitors and methods			
문헌번호 (문헌일)	US8455516 (2013-06-04)	출원번호 (출원일)	13/006716 (2011-01-14)
출원인	TOURO UNIVERSITY (US)	기술분류	fusion inhibitors/화합물
요약	A new series of HIV-1 fusion inhibitors and methods of use are disclosed. The compounds are based on a substituted indole, benzimidazole, indoline or isoindoline fragment. The compounds find use in inhibiting or preventing HIV fusion from occurring, thus inhibiting or preventing entry of viral RNA into host cells. The compounds may be useful towards other biological targets involving protein-protein interactions.		
대표청구항	1. A compound, according to formula Va: [Image]wherein: Z3 is —(CH2)0-3CO2Ra or H;each Ra is independently H, C1-6alkyl, C3-8cycloalkyl, C4-11cycloalkylalkyl, C6-10aryl, C7-16arylalkyl, 3-10 membered heteroalicyclyl, 4-11 membered heteroalicyclylalkyl, 5-15 membered heteroaryl or 6-16 membered heteroarylalkyl;each R2a is independently optionally substituted C1-6alkyl, halo, —OC1-6alkyl, —OH —N(C1-6alkyl)2, —N(H)C1-6alkyl, —CN, —NO2, —C(O)C1-6alkyl,		

	—CO2H, —CO2C1-6alkyl, —C(O)N(H)C1-6alkyl or —C(O)N(C1-6alkyl)2;each of R3 and R4 are, independently, —H, halo, optionally substituted C1-6alkyl, optionally substituted C3-8cycloalkyl, optionally substituted C4-11cycloalkylalkyl, optionally substituted C6-10aryl, optionally substituted C7-16arylalkyl, optionally substituted 3-10 membered heteroalicyclyl, optionally substituted 4-11 membered heteroalicyclylalkyl, optionally substituted 5-15 membered heteroaryl or 6-16 membered heteroarylalkyl; andwhere each R40 is independently C1-6alkyl, halo, —OC1-6alkyl, —OH, —N(R80a)2, perhaloalkyl, —CN, —NO2, —CO2C1-6alkyl or —C(O)NR80aR80a, where each R80a is independently H or C1-6alkyl; and at least one of R40 is —OC1-6alkyl.

□ US8236779

Antiviral nucleosides			
문헌번호 (문헌일)	US8236779 (2012-08-07)	출원번호 (출원일)	13/014022 (2011-01-26)
출원인	ROCHE PALO ALTO (US)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	Compounds having the formula I wherein R1, R2 and R3 are as defined herein are Hepatitis C virus NS5b polymerase inhibitors. Also disclosed are compositions and methods for treating an HCV infection and inhibiting HCV replication.		
대표청구항	1. A compound according to formula I [Image]wherein: R1 and R2 are (i) independently in each occurrence selected from the group consisting of hydrogen, C2-6 alkylcarbonyl, C1-6 alkoxycarbonyl, and C1-6 aminoalkylcarbonyl or (ii) taken together both R1 and R2 moieties together are C(═O);R3 is hydrogen, C2-6 alkylcarbonyl, C1-6 alkoxycarbonyl or C1-6 aminoalkylcarbonyl or, a pharmaceutically acceptable salt thereof with the proviso that at least one of R1, R2 and R3 are other than hydrogen.		

□ CN102204914

Use of 4-alkyl-6-aryl-5-acetyl-1,3-thiazine for preparing neuraminidase inhibitor			
문헌번호 (문헌일)	CN102204914 (2013-02-27)	출원번호 (출원일)	2011-10077574 (2011-03-30)
출원인	HUNAN UNIV (CN)	기술분류	뉴라미니다아제 저해/화합물
요약	The invention discloses use of 4-alkyl-6-aryl-5-acetyl-1,3-thiazine represented by a chemical structural formula I and 4-alkyl-6-aryl-5-acetyl-2-amino-1,3-thiazine salts, or 4-alkyl-6-aryl-5-acetyl-2-amido-1,3-thiazine represented by a chemical structural formula II and 4-alkyl-6-aryl-5-acetyl-2-amido-1,3-thiazine salts for preparing a neuraminidase inhibitor of influenza viruses.		
대표청구항	1. the alkyl-6-aryl of the 4-shown in the chemical structural formula I-5-acetyl		

	group-2-is amino-1, the application in the preparation neuraminidase inhibitor of 3-thiazine or its salt:Wherein, X is selected among the formula I: 2-chlorine, 2-fluorine, 2-hydroxyl, 2-methoxyl group, 2-ethyoxyl, 2-nitro, 3-dimethylamino, 3-chlorine, 3-bromine, 3-fluorine, 3-methyl, 3-ethyl, 3-trifluoromethyl, 3-hydroxyl, 3-methoxyl group, 3-ethyoxyl, 3-nitro, 4-dimethylamino, 4-chlorine, 4-bromine, 4-fluorine, 4-methyl, 4-ethyl, 4-trifluoromethyl, 4-hydroxyl, 4-methoxyl group, 4-ethyoxyl, 4-acetoxyl group, 4-nitro, 2-chloro-5-nitro, 3-ethyl-4-hydroxyl, 3,4-dimethoxy or 2,4,5-trimethoxy; R 1Be selected from: C 1～C 2Alkyl, C 3～C 4Straight chained alkyl or branched alkyl; Salt is selected from hydrochlorate, hydrobromate, phosphate, sulfate, nitrate, mesylate or tosilate.

□ KR10-1331167

신규한 오셀타미비르 유도체 및 그 제조방법			
문헌번호 (문헌일)	KR10-1331167 (2013-11-13)	출원번호 (출원일)	10-2011-0085901 (2011-08-26)
출원인	메디포럼제약 (KR)	기술분류	뉴라미니다아제 저해/화합물
요약	본 발명에서는 신규한 구조를 갖는 오셀타미비르 유도체 및 그 제조방법이 제공된다. 본 발명에 따른 신규한 구조를 갖는 오셀타미비르 우레아 (또는 티오우레아) 유도체는 우수한 뉴라미니다제 결합(억제) 활성을 나타내어 항바이러스제로 사용될 수 있다.		
대표청구항	하기 화학식 (I)로 나타내어지는 오셀타미비르 유도체: [이미지](I)상기 식에서, R1는 N3 또는 NH2 이고, R2은 O 또는 S이고, R3은 C1-C8 직쇄 알킬기 또는 그것들의 할로겐 치환체; C1-C4 알킬, C1-C4 알콕시, 할로겐, 및 트리플루오로메틸 중에서 선택된 1 내지 3의 치환체에 의해 치환된 페닐이다.		

□ CN102964267

Cyclohexene compound having influenza virus neuraminidase inhibition activity, preparation method and application			
문헌번호 (문헌일)	CN102964267 (2015-06-10)	출원번호 (출원일)	2011-10257557 (2011-09-01)
출원인	SUN YAT-SEN UNIV (CN)	기술분류	뉴라미니다아제 저해/화합물
요약	The invention provides a compound expressed by a general formula I, or its pharmaceutically acceptable salt, and an analyzed enantiomer and a purified diastereomer, wherein Ris H or C1-12 alkyl groups; R is H, -C(O)R, -C(O)OR or -S(O)2R, wherein R is H or C1-6 alkyl groups, R is selected from H or C1-6 alkyl groups halogenated hydrocarbon, phenyl or aryl group; R is selected from C1-4 alkyl groups substituted amino, halogen, hydroxyl, sulfydryl, guanidyl, nitryl or cyano group; and R is -(CH2)nCO2H, -(CH2)nP(O)(OH)2, -(CH2)nCO2R and -(CH2)nP(O)(OR)2, wherein R is H or C1-6 alkyl groups, n is an integer between 0 and 4, or a salt of the above groups. The invention also provides a preparation method of the cyclohexene compound expressed by the general formula I, and an application of the cyclohexene compound taken as an influenza virus neuraminidase		

	inhibitor for preparing the medicines to prevent or treat the influenza diseases.
대표청구항	1. a synthetic method for the compound that general formula I below represents,R 1h or C 1-12alkyl; R 2-C (O) R 1a,-C (O) OR 1aor-S (O) 2r 1b, wherein R 1ah or C 1-6alkyl, R 1bbe selected from H or C 1-6alkyl, C 1-6halogenated alkane, the group of phenyl or aryl; R 3amino, C 1-4the amino that alkyl replaces, halogen, hydroxyl, sulfydryl, guanidine radicals, nitro or cyano group; R 4-(CH 2) np (O) (OH) 2, or-(CH 2) np (O) (OR 1a) 2, wherein R 1ah or C 1-6alkyl, n is the integer of 0 to 4, or more the salt of phosphonyl group, Described synthetic method is synthetic method one or synthetic method two, wherein,Described synthetic method one comprises: steps A: by with the amino alcohol of the replacement of following formula 1 and Boc anhydride reaction, then through Swern oxidation or IBX oxidizing reaction, then obtain with the propenal of the replacement through amido protecting of following formula 2 with Wittig reagent react;, then there is addition reaction with Nitromethane 99Min. in step B: react with the phosphonic acid ester of following formula 3 and paraformaldehyde under the first base catalysis, then add tosic acid reflux dewatering, obtain with the intermediate of following formula 4 under the second alkali exists;Step C: the Michael/Horner-Wadsworth-Emmons (HWE) that the propenal of the replacement through amido protecting of formula 2 and the intermediate of formula 4 connected under the 3rd base catalysis reacts, through being separated the tetrahydrobenzene intermediate that can obtain with the replacement of following formula 5;Step D: the tetrahydrobenzene intermediate of the replacement of formula 5 sloughs Boc protecting group in acid condition, alternatively, then generates with the intermediate of following formula 6 with acyl chlorides or SULPHURYL CHLORIDE under the 4th base catalysis; AndAlternatively, step e: the nitro in the intermediate of formula 6, through a step or the conversion of multistep substituting group, obtains the compound of general formula I,Described in described step B, the first alkali is selected from diethylamine, triethylamine, diisopropylethylamine, thanomin, diethanolamine, trolamine, Diisopropylamine, dipropyl amine, tripropyl amine, piperidines, pyridine, tetramethyleneimine, and described second alkali is selected from sodium methylate, sodium ethylate, sodium tert-butoxide, cesium carbonate, cesium hydroxide, sodium hydroxide, potassium hydroxide, triethylamine, diisopropylethylamine, piperidines;Described in described step C, the 3rd alkali is selected from cesium carbonate, salt of wormwood, sodium carbonate, cesium fluoride, Potassium monofluoride, Sodium Fluoride, 1,8-diazabicylo [5.4.0] 11 carbon-7-alkene (DBU), triethylamine, diethylamine, piperidines, pyridine, tetramethyleneimine, wherein said separation is realized by silica gel column chromatography;Acid described in described step D is selected from trifluoroacetic acid, tosic acid, trifluoromethanesulfonic acid, hydrochloric acid, sulfuric acid, nitric acid, described 4th alkali is selected from triethylamine, diethylamine, diisopropylethylamine, piperidines, pyridine, tetramethyleneimine, sodium carbonate, cesium carbonate, salt of wormwood alternatively, and described synthetic method two comprises:Steps A ': by with the amino alcohol of the replacement of following formula 1 and excess acetyl chloride, then through Swern oxidation or IBX oxidizing reaction, then obtain

	the propenal of the replacement protected through ethanoyl with the amino of following formula 2 ' with Wittig reagent react;, then there is addition reaction with Nitromethane 99Min. in step B ': react with the phosphonic acid ester of following formula 3 and paraformaldehyde under the first base catalysis, then add tosic acid reflux dewatering, obtain with the intermediate of following formula 4 under the second alkali exists;Step C ': the propenal of the replacement protected through ethanoyl by the amino of formula 2 ' and the intermediate of formula 4 Michael/Horner-Wadsworth-Emmons (HWE) that connects under the 3rd base catalysis reacts, through being separated the tetrahydrobenzene intermediate that can obtain with the replacement of following formula 5 ';Step D ': the tetrahydrobenzene intermediate deacetylate protecting group in acid condition of the replacement of formula 5 ', alternatively, then generates with the intermediate of following formula 6 with acyl chlorides or SULPHURYL CHLORIDE under the 4th base catalysis; AndAlternatively, step e ': the nitro in the intermediate of formula 6, through a step or the conversion of multistep substituting group, obtains the compound of general formula I,Described in described step B ', the first alkali is selected from diethylamine, triethylamine, diisopropylethylamine, thanomin, diethanolamine, trolamine, Diisopropylamine, dipropyl amine, tripropyl amine, piperidines, pyridine, tetramethyleneimine, and described second alkali is selected from sodium methylate, sodium e...

□ US8546389

Viral polymerase inhibitors			
문헌번호 (문헌일)	US8546389 (2013-10-01)	출원번호 (출원일)	13/278021 (2011-10-20)
출원인	BIOTA SCIENT MANAGEMENT (AU)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	The present invention relates to viral polymerase inhibitors of formula (I), salts, N-oxides, solvates, hydrates, racemates, enantiomers or isomers thereof, processes for their preparation and their use in the treatment of Flaviviridae viral infections such as Hepatitis C virus (HCV) infections:		
대표청구항	1. A compound of formula (I), salts, N-oxides, solvates, hydrates, racemates, or enantiomers thereof: [Image]Z1 and Z2 are each independently selected from C—H, C-halo, C—C1-4alkyl, C—C1-4alkylhalo, C—C1-4alkoxy, C—C1-4alkoxyhalo and N;R1 is selected from H, C1-6alkyl, C2-6alkenyl, C2-6alkynyl, C1-6alkoxy, halo, C1-4alkylhalo, C1-4alkoxyhalo, C3-7cycloalkyl, C3-7cycloalkenyl, 5-6-membered heterocyclyl and 5-6 membered heteroaryl and wherein alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, heterocyclyl and heteroaryl in each occurrence may be optionally substituted;R2 is selected from halo, C1-6alkyl, C2-6alkenyl, NO2, N(R5)2, NR5R6,		

	NR6(SO2R5), SO2N(R8)2, SR8, C(R5)2SO2R8, and NR5C(═O)R8;R3 is selected from aryl, aryl-X-aryl, aryl-X-heteroaryl, heteroaryl, heteroaryl-X-heteroaryl, and heteroaryl-X-aryl wherein X is [C(R5)2]p, O, S, S(═O), SO2, NR5, C═O, CF2, C(═O)NR5 or NR5C(═O) wherein p is 1, 2 or 3 and wherein aryl and heteroaryl in each occurrence may be optionally substituted;R4 is H, C1-4alkyl, C2-4alkenyl, C2-4alkynyl, or C3-7cycloalkyl;R5 in each occurrence is independently H or optionally substituted C1-6alkyl;R6 is selected from H, C1-6alkyl, C2-6alkenyl, C2-6alkynyl, C1-6alkoxy, C1-6alkylhalo, C1-6alkoxyhalo, R8, C1-6alkyl-R8, C1-6alkyl-OR8, C1-6alkyl-SR8, C1-6alkyl-S(═O)R8, C1-6alkyl-SO2R8, C1-6alkyl-N(R8)2, C1-6alkyl-C(═O)-R8, C1-6alkyl-O(C═O)—R8, C1-6alkyl-C(═O)O—R8, C1-6alkyl-C(═O)N(R8)2, C1-6alkyl-NR5C(═O)—R8, C1-6alkyl-NR5SO2—R8, C1-6alkyl-SO2NR5—R8 and C1-6alkyl-C(═O)NR5SO2R8 and wherein alkyl, alkenyl, alkynyl, alkoxy, aryl, cycloalkyl, heterocyclyl and heteroaryl in each occurrence of R6 may be optionally substituted;R8 in each occurrence is independently H, an optionally substituted C1-6alkyl, an optionally substituted C2-6alkenyl, an optionally substituted (C1-6alkyl)q-aryl, an optionally substituted (C1-6alkyl)q-C3-7cycloalkyl, an optionally substituted (C1-6alkyl)q-5-6-membered heterocyclyl or an optionally substituted (C1-6alkyl)q-5-6-membered heteroaryl; andq is 0 or 1.

□ CN103145608

Anti-enterovirus 71 (EV71) caprolactam compounds, and preparation method and application thereof			
문헌번호 (문헌일)	CN103145608 (2015-09-02)	출원번호 (출원일)	2011-10402922 (2011-12-07)
출원인	NANKAI UNIV (CN)	기술분류	protease inhibitors/화합물
요약	The invention relates to a caprolactam anti-enterovirus 71 (EV71) 3C protease inhibitor with a structural formula shown as compounds (M). Each variable in the structure is defined as the specification. The compounds can effectively inhibit or block replication of enterovirus 71. The invention relates to discovery and application of compounds comprising a structure of formula (M), various optical isomers thereof, metabolites with pharmaceutically activity, pharmaceutically acceptable salts, solvates and prodrugs in preparing antiviral drugs for treating virus infections of hand-foot-and-mouth diseases. The invention also relates to an intermediate and a synthetic method for preparing the compounds having the structure of the formula (M).		
대표청구항	1. 2-piperidone base lopps enteric virus71 (EV71) HRV 3CP inhibitor, has compound or its optical isomer, the pharmacologically acceptable salt of structure as follows:		

□ US8846896

Methods of preparing substituted nucleotide analogs			
문헌번호 (문헌일)	US8846896 (2014-09-30)	출원번호 (출원일)	13/793900 (2013-03-11)
출원인	JOHNSON & JOHNSON GROUP (US)	기술분류	nucleoside analogs/화합물
요약	Disclosed herein are methods of preparing a phosphorothioate nucleotide analog, which are useful in treating diseases and/or conditions such as viral infections.		
대표청구항	1. A method of preparing a compound of Formula (I): [Image]wherein the method comprises: [Image]coupling a compound of Formula (A) and a compound of Formula (B), wherein the —OH groups and —NH group of the compound of Formula (A) are unprotected during the coupling reaction.		

□ US8889701

Substituted (S)-(2R,3R,5R)-3-hydroxy-(5-pyrimidin-1-yl)tetrahydrofuran-2-ylmethyl aryl phosphoramidate			
문헌번호 (문헌일)	US8889701 (2014-11-18)	출원번호 (출원일)	14/051464 (2013-10-11)
출원인	ALLA CHEM, LLC (US)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	The instant invention relates to a novel compound representing a substituted phosphoramidic acid—a (2R,3R,5R)-3-hydroxy-(5-pyrimidin-1-yl)tetrahydrofuran-2-yl)methyl aryl phosphoramidate of formula 1 or a (S)-(2R,3R,5R)-3-hydroxy-(5-pyrimidin-1-yl)tetrahydrofuran-2-yl)methyl aryl phosphoramidate of formula 2, or a pharmaceutically acceptable salt, a hydrate, a crystalline form or a stereoisomer thereof, as defined in the specification.The novel compound is used for a pharmaceutical composition with at least one pharmaceutically acceptable excipient as well as with an inosine 5 monophosphate dehydrogenase inhibitor, HCV protease NS3 inhibitor, HCV protease NS3/4A inhibitor, and RNA polymerase NS5A inhibitor. The novel compound is useful as a viral polymerase HCV NS5B inhibitor and can be used for treating a disease caused by hepatitis C virus (HCV).		
대표청구항	1. A compound selected from a (2R,3R,5R)-3-hydroxy-(5-pyrimidin-1-yl)tetrahydrofuran-2-yl)methyl aryl phosphoramidate of formula 1 or a (5)-(2R,3R,5R)-3-hydroxy-(5-pyrimidin-1-yl)tetrahydrofuran-2-yl)methyl aryl phosphoramidate of formula 2, or a pharmaceutically acceptable salt, a hydrate, a crystalline form or a stereoisomer thereof, [Image]wherein:R1 is (i) hydrogen,		

	(CH3)2[(CH3)3C]Si, a C2-C6acyl, optionally substituted with NR5R6 group, wherein R5 and R6 are independently hydrogen or a C1-C4 alkyl; or (ii) 1-pyrrole-2-ylcarbonyl, piperidin-3-ylcarbonyl or piperidin-4-ylcarbonyl;R2 and R3 are F; or R3 is CH3 and R2 is F or OH;R4 is hydrogen or methyl;Ar is a phenyl, a pyridyl or a naphthyl, wherein phenyl, pyridyl or naphthyl are optionally substituted with at least one of C1-3 alkyl, C2-4 alkenyl, C2-4 alkynyl, C1-3 alkoxy, F, Cl, Br, I, nitro, cyano, or —N(C1-3 alkyl)2;Pm is 2,4-dioxo-3,4-dihydro-2H-pyrimidin-1-yl or 4-(4-amino-2-oxo-2H-pyrimidin-1-yl), in which amino group is optionally substituted with 1-pyrrole-2-ylcarbonyl, piperidin-3-ylcarbonyl, piperidin-4-ylcarbonyl or radical C(O)R8, wherein R8 is (i) a C1-C4alkyl, optionally substituted with NR6R7 group, wherein R6 and R7 are independently hydrogen or C1-C4 alkyl; or (ii) a C1-3 alkoxy optionally substituted with a phenyl;X is O or N—R9, wherein R9 is a C1-C4alkyl, optionally substituted with OH or OCH3;n=1, 2 or 3.

□ US9511056

Antiviral compounds			
문헌번호 (문헌일)	US9511056 (2016-12-06)	출원번호 (출원일)	14/280478 (2014-05-16)
출원인	GILEAD (US)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	The invention is related to anti-viral compounds, compositions containing such compounds, and therapeutic methods that include the administration of such compounds, as well as to processes and intermediates useful for preparing such compounds.		
대표청구항	1. A method of eliminating hepatitis C virus in a human patient in need thereof comprising administering to said human an effective amount of: (1) a compound of formula: [Image]and (2) a NS5B polymerase inhibitor.		

□ US9475832

Phosphonates with reduced toxicity for treatment of viral infections			
문헌번호 (문헌일)	US9475832 (2016-10-25)	출원번호 (출원일)	14/499865 (2014-09-29)
출원인	CALIFORNIA UNIV (US)	기술분류	DNA, RNA polymerase 억제제/화합물
요약	There are provided, inter alia, acyclic nucleoside phosphonate compounds having reduced toxicity and enhanced antiviral activity, and pharmaceutically accepted salts and solvates thereof. There are also provided methods of using the disclosed compounds for inhibiting viral RNA-dependent RNA polymerase, inhibiting viral reverse transcriptase, inhibiting replication of virus, including hepatitis C virus or a human retrovirus, and treating a subject infected with a virus, including hepatitis C virus or a human retrovirus.		
대표청구항	1. A method of inhibiting an HCV RNA-dependent RNA polymerase comprising contacting a cell which includes an HCV RNA-dependent RNA polymerase with an effective amount of a compound of Formula (I), or a pharmaceutically acceptable salt or solvate thereof, thereby inhibiting the viral RNA-dependent RNA polymerase; wherein the compound of Formula (I) has the structure: [Image]wherein BN is a substituted or unsubstituted nucleobase;L1 is a bond or —O—;R1 is halogen, —CF3, unsubstituted alkyl, substituted or unsubstituted cycloalkyl, or substituted or unsubstituted aryl;provided that, if L1 is a bond, then R1 is halogen, and if L1 is —O—, then R1 is —CF3, unsubstituted alkyl, substituted or unsubstituted cycloalkyl, or substituted or unsubstituted aryl; R2 is -L2-O—R3 (II),wherein L2 is a substituted or unsubstituted alkylene, substituted or unsubstituted cycloalkylene, or substituted or unsubstituted arylene; andR3 is substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, or substituted or unsubstituted aryl.		

1-2 항체

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	US8673314	12/788103	2010-05-26	Monoclonal antibodies against influenza virus generated by cyclical administration and uses thereof	MOUNT SINAI SCHOOL OF MEDICINE
2	CN101812131	2010-10171543	2010-05-06	Humanized neutralizing antibody (RVFab8) against rabies virus glycoprotein	NATIONAL INSTITUE FOR VIRAL DISEASE CONTROL AND PREVENTION, CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION
3	KR10-1514682	10-2012-0107512	2012-09-27	인간 B 세포에서 생산된 인플루엔자 A 바이러스 중화 활성을 가지는 결합 분자	셀트리온
4	US10023629	14/651043	2013-12-11	Anti-influenza antibody	VIB VZW
5	US9695240	14/528142	2014-10-30	Anthracycline derivative conjugates, process for their preparation and their use as antitumor compounds	GENENTECH
6	CN103864924	2014-10050894	2014-02-14	Middle east and respiratory syndrome coronavirus antibody and preparation method thereof	INST OF MICROBIOLOGY CHINESE ACAD OF SCI

□ US8673314

Monoclonal antibodies against influenza virus generated by cyclical administration and uses thereof			
문헌번호 (문헌일)	US8673314 (2014-03-18)	출원번호 (출원일)	12/788103 (2010-05-26)
출원인	MOUNT SINAI SCHOOL OF MEDICINE (US)	기술분류	neutralize virus/항체
요약	Provided herein are methods of producing neutralizing monoclonal antibodies, by cyclical immunization, that cross-react with strains of Influenza virus of the same subtype or different subtypes. Also provided herein are compositions comprising such antibodies and methods of using such antibodies to diagnose, prevent or treat Influenza virus disease.		
대표청구항	1. A method for generating a monoclonal antibody that binds to and neutralizes two or more strains of an Influenza A virus of the H1 or H3 subtype, comprising (i) administering two, three, four or more immunogenic compositions to a non-human subject, with the administration of each immunogenic composition separated by a certain amount of time, and (ii) generating B-cell hybridomas from the subject and selecting for hybridoma clones that produce a monoclonal antibody that binds to and neutralizes two or more strains of an Influenza A virus of the H1 or H3 subtype, wherein each immunogenic composition comprises an inactivated Influenza virus having a hemagglutinin (HA) polypeptide of the H1 or H3 subtype, an attenuated Influenza virus having an HA polypeptide of the H1 or H3 subtype, a live Influenza virus having an HA polypeptide of the H1 or H3 subtype other than an attenuated Influenza virus having an HA polypeptide of the H1 or H3 subtype, an HA polypeptide or fragment thereof derived or obtained from an Influenza A virus of the H1 or H3 subtype, or a nucleic acid encoding an HA polypeptide or fragment thereof derived or obtained from an Influenza virus of the H1 or H3 subtype, and wherein one immunogenic composition differs from another immunogenic composition in that the HA polypeptide of the H1 or H3 subtype of the Influenza virus, the HA polypeptide of the H1 or H3 subtype or fragment thereof, or the HA polypeptide of the H1 or H3 subtype or fragment thereof encoded by the nucleic acid are antigenically distinct.		

□ CN101812131

Humanized neutralizing antibody (RVFab8) against rabies virus glycoprotein			
문헌번호 (문헌일)	CN101812131 (2012-07-04)	출원번호 (출원일)	2010-10171543 (2010-05-06)
출원인	NATIONAL INSTITUE FOR VIRAL DISEASE CONTROL AND PREVENTION, CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION (CN)	기술분류	neutralize virus/항체
요약	The invention discloses a humanized neutralizing antibody (RVFab8) against rabies virus glycoprotein, which is obtained through screening by utilizing phage display technology. The antibody specifically identifies the granule antigen of the rabies virus, is against the rabies virus glycoprotein G, has obvious immunofluorescence reaction and enzyme linked immunosorbent assay with the rabies virus and has the neutralizing activity function against rabies virus infection. The antibody can be prepared into the specific antibody drugs for preventing and treating rabies, thereby being clinically used for preventing and treating rabies caused by the rabies virus.		
대표청구항	1. a human source anti-rabies virus gp neutrality antibody is characterized in that, the aminoacid sequence of its light chain CDR1, CDR2 and CDR3 and heavy chain CDR1, CDR2 and CDR3 is as shown in the table: CDR1 CDR2 CDR3 VH SVNSYWG NFYYSGNTHYNPSLKS QSTIGGFFDY VL TGTSSDIGNYNLVS EVTKRPS SSYTATKNYWI		

□ KR10-1514682

인간 B 세포에서 생산된 인플루엔자 A 바이러스 중화 활성을 가지는 결합 분자			
문헌번호 (문헌일)	KR10-1514682 (2015-04-17)	출원번호 (출원일)	10-2012-0107512 (2012-09-27)
출원인	셀트리온 (KR)	기술분류	neutralize virus/항체
요약	본 발명은 인간 B 세포에서 생산된 인플루엔자 A 바이러스 중화 활성을 가진 결합 분자에 관한 것으로, 본 발명의 인플루엔자 A 바이러스에 중화 활성을 가지는 결합 분자는 인플루엔자 A 바이러스에 감염된 환자의 혈액에서 선별된 B 세포에서 생산하는 결합 분자로서 인플루엔자 A 바이러스 대하여 중화 활성을 가지고 있으므로 인플루엔자 A 바이러스 유래 질환의 예방 및 치료에 유용하며, 본 발명의 결합 분자를 이용하여 인플루엔자 A 바이러스의 진단에도 유용하게 이용될 수 있다.		

대표청구항	하기 a) 내지 d)의 결합 분자로 이루어진 군으로부터 선택되는 어느 하나의 결합 분자인 것을 특징으로 하는 인플루엔자 A 바이러스에 대한 중화 활성을 가지는 결합 분자:a) 카밧 방법(Kabat method)에 따라, 서열번호 1로 기재되는 CDR1 영역, 서열번호 2로 기재되는 CDR2 영역 및 서열번호 3으로 기재되는 CDR3 영역을 포함하는 경쇄 및 서열번호 4로 기재되는 CDR1 영역, 서열번호 5로 기재되는 CDR2 영역 및 서열번호 6으로 기재되는 CDR3 영역을 포함하는 중쇄로 구성되는 결합 분자;b) 카밧 방법(Kabat method)에 따라, 서열번호 7로 기재되는 CDR1 영역, 서열번호 8로 기재되는 CDR2 영역 및 서열번호 9로 기재되는 CDR3 영역을 포함하는 경쇄 및 서열번호 10으로 기재되는 CDR1 영역, 서열번호 11로 기재되는 CDR2 영역 및 서열번호 12로 기재되는 CDR3 영역을 포함하는 중쇄로 구성되는 결합 분자; c) 카밧 방법(Kabat method)에 따라, 서열번호 13으로 기재되는 CDR1 영역, 서열번호 8로 기재되는 CDR2 영역 및 서열번호 9로 기재되는 CDR3 영역을 포함하는 경쇄 및 서열번호 10으로 기재되는 CDR1 영역, 서열번호 14로 기재되는 CDR2 영역 및 서열번호 6으로 기재되는 CDR3 영역을 포함하는 중쇄로 구성되는 결합 분자; 및d) 카밧 방법(Kabat method)에 따라, 서열번호 15로 기재되는 CDR1 영역, 서열번호 16으로 기재되는 CDR2 영역 및 서열번호 9로 기재되는 CDR3 영역을 포함하는 경쇄 및 서열번호 10으로 기재되는 CDR1 영역, 서열번호 17로 기재되는 CDR2 영역 및 서열번호 12로 기재되는 CDR3 영역을 포함하는 중쇄로 구성되는 결합 분자.

□ US10023629

Anti-influenza antibody			
문헌번호 (문헌일)	US10023629 (2018-07-17)	출원번호 (출원일)	14/651043 (2013-12-11)
출원인	VIB VZW (BE)	기술분류	뉴라미니다아제 저해/항체
요약	The present invention relates to an antibody that confers protection against influenza virus infection. More specifically, it relates to an anti-neuraminidase antibody, protecting against highly pathogenic H5N1 influenza strains. The invention relates further to the use of the antibody for prophylactic and/or therapeutic treatment of influenza virus infections, and to a pharmaceutical composition comprising the antibody.		
대표청구항	1. A VHH that specifically binds influenza neuraminidase, comprising a CDR1 loop sequence of SEQ ID NO: 1, a CDR2 loop sequence of SEQ ID NO: 3, and a CDR3 loop sequence of SEQ ID NO: 5.		

□ US9695240

Anthracycline derivative conjugates, process for their preparation and their use as antitumor compounds			
문헌번호 (문헌일)	US9695240 (2017-07-04)	출원번호 (출원일)	14/528142 (2014-10-30)
출원인	GENENTECH (US)	기술분류	virus/receptor interaction/항체
요약	The present invention relates to conjugates of therapeutically useful anthracyclines with carriers such as polyclonal and monoclonal antibodies, proteins or peptides of natural or synthetic origin; methods for their preparation, pharmaceutical composition containing them and use thereof in treating certain mammalian tumors.		
대표청구항	1. A method of making an antibody-drug conjugate compound comprising reacting an anthracycline derivative and an antibody (Ab) to form the antibody-drug conjugate compound, wherein the anthracycline derivative is selected from the structures: [Image] [Image]where R is H, C1-C12 alkyl, or C6-C20 aryl; andR1 and R2 are independently selected from an amino acid side chain;the antibody (Ab) is an antibody which binds to one or more tumor-associated antigens or cell-surface receptors selected from (1)-(36):(1) BMPR1B (bone morphogenetic protein receptor-type IB);(2) E16 (LAT1, SLC7A5);(3) STEAP1 (six transmembrane epithelial antigen of prostate);(4) 0772P (CA125, MUC16);(5) MPF (MPF, MSLN, SMR, megakaryocyte potentiating factor, mesothelin);(6) Napi3b (NAPI-3B, NPTIIb, SLC34A2, solute carrier family 34 (sodium phosphate), member 2, type II sodium-dependent phosphate transporter 3b);(7) Sema 5b (FLJ10372, KIAA1445, Mm.42015, SEMA5B, SEMAG, Semaphorin 5b Hlog, sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5B);(8) PSCA hlg (2700050C12Rik, C530008O16Rik, RIKEN cDNA 2700050C12, RIKEN cDNA 2700050C12 gene);(9) ETBR (Endothelin type B receptor);(10) MSG783 (RNF124, hypothetical protein FLJ20315);(11) STEAP2 (HGNC_8639, IPCA-1, PCANAP1, STAMP1, STEAP2, STMP, prostate cancer associated gene 1, prostate cancer associated protein 1, six transmembrane epithelial antigen of prostate 2, six transmembrane prostate protein);(12) TrpM4 (BR22450, FLJ20041, TRPM4, TRPM4B, transient receptor potential cation channel, subfamily M, member 4);(13) CRIPTO (CR, CR1, CRGF, CRIPTO, TDGF1, teratocarcinoma-derived growth factor);(14) CD21 (CR2 (Complement receptor 2) or C3DR (C3d/Epstein Barr virus receptor) or Hs 73792);(15) CD79b (CD79B , CD79β, IGb (immunoglobulin-associated beta), B29);(16) FcRH2 (IFGP4, IRTA4, SPAP1A (SH2 domain containing phosphatase anchor protein 1a), SPAP1B, SPAP1C);(17) HER2 (ErbB2);(18) NCA (CEACAM6);(19) MDP (DPEP1);(20) IL20Rα (IL20Ra , ZCYTOR7);(21) Brevican (BCAN, BEHAB);(22) EphB2R (DRT, ERK, Hek5, EPHT3, Tyro5);(23) ASLG659 (B7h);(24) PSCA (Prostate stem cell antigen precursor);(25) GEDA (lipoma HMGIC fusion-partner-like protein);(26) BAFF-R (B cell-activating factor receptor, BLyS receptor 3, BR3);(27) CD22 (B-cell receptor CD22-B isoform);(28) CD79a (CD79A, CD79α,		

	immunoglobulin-associated alpha);(29) CXCR5 (Burkitt's lymphoma receptor 1);(30) HLA-DOB (Beta subunit of MHC class II molecule (Ia antigen));(31) P2X5 (Purinergic receptor P2X ligand-gated ion channel 5);(32) CD72 (B-cell differentiation antigen CD72, Lyb-2);(33) LY64 (Lymphocyte antigen 64 (RP105), type I membrane protein of the leucine rich repeat (LRR) family);(34) FcRH1 (Fc receptor-like protein 1);(35) IRTA2 (Fc receptor-like protein 1, Immunoglobulin superfamily receptor translocation associated 2); and(36) TENB2 (TMEFF2, tomoregulin, TPEF, HPP1, TR, putative transmembrane proteoglycan); andthe antibody-drug conjugate compound is selected from the structures: [Image] [Image]

□ CN103864924

Middle east and respiratory syndrome coronavirus antibody and preparation method thereof			
문헌번호 (문헌일)	CN103864924 (2016-09-07)	출원번호 (출원일)	2014-10050894 (2014-02-14)
출원인	INST OF MICROBIOLOGY CHINESE ACAD OF SCI (CN)	기술분류	neutralize virus/항체
요약	The invention discloses a middle east and respiratory syndrome coronavirus antibody and a preparation method thereof, and belongs to the technical field of cell-mediated immunity. RDB protein of an MERS-CoV virus S protein receptor binding domain is obtained by using in-vitro expression and purification of a baculovirus expression vector system, and Bab/c mice are immunized by using high-purity MERS RBD protein, an efficient antiviral neutralizing anti-body is screened by the methods such as an enzyme-linked immuno sorbent assay (ELISA), a false virus neutralization experiment and the like. The antibody and the crystal structure of the MERS RBD protein are analyzed, and a crucial amino acid of the antibody combined with viral proteins is determined from the molecular level. Thus, the antibody is further humanized, and the possibility is provided for clinical detection, prevention and treatment of MERS-CoV virus infection.		
대표청구항	1. a humanization MERS-CoV mouse resource monoclonal neutralizing antibody, it is characterised in that its heavy chain, the amino acid sequence of light chain Respectively as shown in SEQ ID NO.3, SEQ ID NO.4.		

1-3 펩타이드

□ CN102241744

Virus infection blocker, and its drug composition and application			
문헌번호 (문헌일)	CN102241744 (2015-03-04)	출원번호 (출원일)	2010-10174788 (2010-05-14)
출원인	SHANGHAI HEPU PHARMACEUTICAL CO., LTD. (CN)	기술분류	virus/receptor interaction/펩타이드
요약	The invention relates to a blocker for preventing and treating a virus infection. Through a change of modifications of a tail end N and a tail end C, a stability of the blocker and an effectiveness of virus infection blocking can be influenced obviously. The invention also relates to an application of the blocker in the prevention and the treatment of a virus infection.		
대표청구항	1. a peptide species, be selected from SEQ ID NO:1,2, the aminoacid sequence shown in 3 or 4; Wherein, this polypeptide N hold for myristoylation modify and C hold be amidated modification.		

1-4 핵산

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	JP5860464	2013-523537	2011-08-12	코드된 단백질의 발현을 증가시키기 위한, 히스톤 스템 루프 및 폴리(A) 배열 또는 폴리아데닐화 신호를 포함하거나 또는 코딩하는 핵산	CUREVAC AG
2	US9675668	14/105208	2013-12-13	Modified polynucleotides encoding hepatitis A virus cellular receptor 2	MODERNA THERAPEUTICS, INC.
3	CN104480144	2014-10770508	2014-12-12	CRISPR/Cas9 recombinant lentiviral vector for human immunodeficiency virus gene therapy and lentivirus of CRISPR/Cas9 recombinant lentiviral vector	WUHAN UNIV
4	US9605266	14/801710	2015-07-16	Cell-specific internalizing RNA aptamers against human CCR5 and uses therefore	CITY OF HOPE

□ JP5860464

코드된 단백질의 발현을 증가시키기 위한, 히스톤 스템 루프 및 폴리(A) 배열 또는 폴리아데닐화 신호를 포함하거나 또는 코딩하는 핵산			
문헌번호 (문헌일)	JP5860464 (2015-12-25)	출원번호 (출원일)	2013-523537 (2011-08-12)
출원인	CUREVAC AG (DE)	기술분류	nucleoside analogs/핵산
요약	【요약】 본 출원은 히스톤 스템 루프 및 폴리(A) 배열 또는 폴리아데닐화 신호를 포함하거나 또는 코드하는 코드 핵산 서열, 특히 전령 RNA(mRNA) 및 코드된 단백질의 발현 증가를 위한 그 사용을 기재한다. (예를 들면 종양 및 암 질환, 심혈관 질환, 감염증, 자기면역질환, 또는 유전병의 처치 또는 유전자 요법으로 이용하기 위한) 약학적 조성물, 특히 백신의 조제를 위한 그 사용도 개시한다. 본 발명은 또한 시험관 내 전사법, 히스톤 스템 루프 및 폴리(A) 배열 또는 폴리아데닐화 신호를 포함하거나 또는 코드하는 핵산을 사용한 단백질 발현의 증가를 위한 인비트로에서의 방법 및 엑스 비보에서의 방법 및 생체 내에서의 방법을 기재한다.		
대표청구항	【請求項1】 a) 페 프치드 또는 단백질을 코드 하는 코드 영역이며 , 단, 상기 코드 영역이 히스톤 단백질, EGFP 및 루시페라제에서 선택되는 리포터 단백질 및 α글로빈, 갈락토키나제 및 크산틴:구아닌 포스포리보실 전이효소(GPT)에서 선택되는 마커 단백질 또는 선택 단백질을 코딩하지 않는 것으로 하는 코드 영역, b) 적어도 하나의 히스톤 스템 루프 및 c) 폴리(A) 배열 또는 폴리아데닐화 신호를 포함하거나 또는 코딩하는, 핵산 (을)를 포함한, 암 또는 종양 질환, 감염증, 바이러스 감염증, 세균 감염증, 또는 원생동물 감염증, 자가면역질환, 알레르기 또는 알레르기 질환, 1 유전자성 질환, 유전성 질환, 또는 유전병 전반, 유전적 배경을 가지며, 전형적으로는 정의된 유전자 결손에 원인하고 멘델의 법칙에 따라 유전하는 질환, 심혈관 질환, 뉴런 질환, 호흡기계 질환, 소화기계 질환, 피부 질환, 근골격계 장애, 결합 조직 장애, 신생물, 면역 결손, 내분비성 질환, 영양성 질환 및 대사성 질환, 안질환, 혹은 귓병환의 처치를 위한 조성물로서, b)와 c)의 조합은 a)에 의해 규정되는 코드 영역에 의해 코드되는 상기 펩타이드 또는 단백질의 발현 레벨을 증가시키고 그리고 상기 핵산은 RNA인 조성물 .		

□ US9675668

Modified polynucleotides encoding hepatitis A virus cellular receptor 2			
문헌번호 (문헌일)	US9675668 (2017-06-13)	출원번호 (출원일)	14/105208 (2013-12-13)
출원인	MODERNA THERAPEUTICS, INC. (US)	기술분류	virus/receptor interaction/핵산
요약	The invention relates to compositions and methods for the preparation, manufacture and therapeutic use of polynucleotides, primary transcripts and mmRNA molecules.		
대표청구항	1. An mRNA encoding SEQ ID NO: 10767, wherein said mRNA comprises a coding region having at least 85% identity to SEQ ID NO: 34731.		

□ CN104480144

CRISPR/Cas9 recombinant lentiviral vector for human immunodeficiency virus gene therapy and lentivirus of CRISPR/Cas9 recombinant lentiviral vector			
문헌번호 (문헌일)	CN104480144 (2017-04-12)	출원번호 (출원일)	2014-10770508 (2014-12-12)
출원인	WUHAN UNIV (CN)	기술분류	virus/receptor interaction/핵산
요약	The invention belongs to the field of pharmaceutical and biological engineering, and relates to a CRISPR/Cas9 recombinant lentiviral vector for human immunodeficiency virus gene therapy and a lentivirus of the CRISPR/Cas9 recombinant lentiviral vector. The recombinant lentiviral vector is prepared by carrying out enzyme digestion on a lentiviral vectorlentiCRISPR by BsmBI and connecting into a BsmBI cohesive end-containing CXCR4 specific target sequence to recombine; the obtained CRISPR/Cas9 recombinant lentiviral vector is capable of mutating gene sequences at four different loci of ahuman immunodeficiency virusco-receptor CXCR4 and themutatuin rate is high and up to 25-75%. The cells transformed by the recombinant lentiviral vector cannot be infected by the human immunodeficiency virus. Compared with theRNAi-Knockdown, ZFN and TALEN technologies, the method has higher efficiency of suppressing the human immunodeficiency virus replication; the system is rapid to construct, simple and low in cost, is capable of preventing the invasion of the human immunodeficiency virus and is suitable for human immunodeficiency virus gene therapy.		
대표청구항	1. CRISPR/Cas9 recombined lentivirus vectors of the specific target sequence containing CXCR4, the CRISPR/Cas9 recombinant lentivirals Viral vector by slow virus carrier lentiCRISPR with BsmBI enzyme action after, be connected into the CXCR4 specific targets with BsmBI sticky ends Sequence is recombinated and is obtained, it is characterised in that : The specific target sequence of CXCR4 as shown in SEQ ID NO.1-4 any one, all target sequences Row are located at people and Rhesus Macacus gene conserved region, and completely the same in people and Rhesus Macacus.		

□ US9605266

Cell-specific internalizing RNA aptamers against human CCR5 and uses therefore			
문헌번호 (문헌일)	US9605266 (2017-03-28)	출원번호 (출원일)	14/801710 (2015-07-16)
출원인	CITY OF HOPE (US)	기술분류	neutralize virus/핵산
요약	Provided herein are fluoropyrimidine-modified RNA aptamers capable of binding CCR5. The compositions and methods provided herein are, inter alia, useful for the delivery of anti-viral drugs (e.g., siRNAs) and preventing HIV entry into a target cell.		
대표청구항	1. A chimeric construct comprising an aptamer and antiviral siRNA, optionally linked by a suitable linker, wherein said aptamer has at least 80% sequence identity with G-3(SEQ ID NO: 1)5-GGG AGG ACG AUG CGG GCC UUC GUU UGU UUC GUC CACAGA CGA CUC GCC CGA-3'.		

2. 유사종 바이러스 치료제

2-1 화합물

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	US8349312	12/832383	2010-07-08	Proline substituted cyclosporin analogues	ENANTA PHARM
2	US8367053	12/832357	2010-07-08	Cyclosporin analogues	ENANTA PHARM
3	US8685917	12/832316	2010-07-08	Cyclosporin analogues	ENANTA PHARM
4	US8481483	12/708671	2010-02-19	Cyclosporin analogues	ENANTA PHARM
5	US8999969	13/383180	2010-07-07	Anti-RSV compounds	GILEAD
6	US8476225	12/958086	2010-12-01	Antiviral compounds	GILEAD
7	US9737478	12/881124	2010-09-13	Treatment of malaria	NATIONAL INSTITUTES OF HEALTH
8	US8895499	13/814398	2010-08-05	β-hairpin peptidomimetics	POLYPHOR
9	KR10-1021830	10-2010-0079391	2010-08-17	크레이스토카릭스 오페르쿠라투스로부터 얻은 조류, 돼지 인플루엔자 및 신종플루에 대한 항바이러스제	중앙백신연구소
10	KR10-1340260	10-2012-7027321	2011-03-28	(-)-카르본, (+)-카르본, 제라니올 및 추가의 정유 성분의 복합물을 포함하는 생체내 치료 용도를 위한 바이러스 억제제 조성물	CESA ALLIANCE S.A.
11	US8178531	13/033015	2011-02-23	Antiviral agents	ENANTA PHARM
12	US8623814	13/032942	2011-02-23	Antiviral agents	ENANTA PHARM
13	EP2615101	2011-823062	2011-09-02	NUCLEOSIDE DERIVATIVES, SYNTHESIS METHODS AND USES THEREOF FOR PREPARING ANTI-TUMOR AND ANTI-VIRUS MEDICAMENTS	HIGH & NEW TECHNOLOGY RESEARCH CENTER, HENANACAD EMYOFSCIEN CES

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
14	US8796319	13/294711	2011-11-11	1,2,5-oxadiazoles as inhibitors of indoleamine 2,3-dioxygenase	INCYTE
15	KR10-1773226	10-2013-7010331	2011-09-21	치환된 다환성 카르바모일 피리돈 유도체의 프로드러그	SHIONOGI
16	US8575119	13/624093	2012-09-21	2′-chloroacetylenyl substituted nucleoside derivatives	ENANTA PHARM
17	US9546150	14/241923	2012-08-29	Substituted quinazolin-4-ones for inhibiting ubiquitin specific protease 7	HYBRIGENICS
18	US9403863	13/610722	2012-09-11	Substituted carbonyloxymethylphosphoramidate compounds and pharmaceutical compositions for the treatment of viral infections	IDENIX PHARMA
19	CN102702147	2012-10200037	2012-06-18	Andrographolide analogue and application of andrographolide analogue to treatment	LIAONING LIFENG TECHNOLOGY DEVELOPMENT CO.,LTD.
20	JP6000283	2013-551360	2012-01-27	HIV 성숙 억제제로서의 C-3 수식 베툴린산 유도체의 C-28 아민	SQUIBB BRISTOL MYERS
21	US9328075	14/115560	2012-05-05	Pyrimidinone compounds and methods for treating influenza	ST JUDE CHILDRENS RES HOSPITAL
22	JP6108696	2012-136013	2012-06-15	인돌 퀴놀린 유도체, 상기 유도체 제조 방법 및 상기 유도체를 함유하는 항말라리아제 및 항암제	OKAYAMA UNIV

□ US8349312

Proline substituted cyclosporin analogues			
문헌번호 (문헌일)	US8349312 (2013-01-08)	출원번호 (출원일)	12/832383 (2010-07-08)
출원인	ENANTA PHARM (US)	기술분류	Flaviviridae/화합물
요약	The present invention provides novel proline substituted cyclosporinanalogue compounds, pharmaceutical compositions comprising these compounds and methods of using these compounds for the treatment of disorders and diseases, including immune disorders, inflammatory disorders and viral infections.		
대표청구항	1. A compound represented by the formula (I); [Image]or a pharmaceutically acceptable salt thereof, where:A is [Image] where, R1 is selected from; a) R11, where R11 is selected from; 1) Hydrogen;2) Deuterium;3) C1-C8 alkyl;4) Substituted C1-C8 alkyl;5) C2-C8 alkenyl;6) Substituted C2-C8 alkenyl;7) C2-C8 alkynyl;8) Substituted C2-C8 alkynyl;9) C3-C12 cycloalkyl;10) Substituted C3-C12 cycloalkyl;11) Aryl;12) Substituted aryl;13) Heterocycloalkyl;14) Substituted heterocycloalkyl;15) Heteroaryl; and16) Substituted heteroaryl;b) —C(O)OR11, where R11 is as previously defined;c) —C(O)R11, where R11 is as previously defined;d) —C(O)OCH2—V—R12, where V is —O— or —S— and R12 is selected from; a. C1-C8 alkyl;b. Substituted C1-C8 alkyl;c. C2-C8 alkenyl;d. Substituted C2-C8 alkenyl;e. C2-C8 alkynyl;f. Substituted C2-C8 alkynyl;g. C3-C12 cycloalkyl;h. Substituted C3-C12 cycloalkyl;i. Aryl;j. Substituted aryl;k. Heterocycloalkyl;l. Substituted heterocycloalkyl;m. Heteroaryl; andn. Substituted heteroaryl;e) —C(O)N(R13)(R14), where R13 and R14 are independently selected from R11 and R11 is as previously defined or R13 and R14 taken together with the nitrogen atom to which they are attached form a substituted or unsubstituted heterocycloalkyl;f) —C(O)SR11, where R11 is as previously defined;g) —C(S)OR11, where R11 is as previously defined;h) —C(O)OCH2OC(O)R12, where R12 is as previously defined;i) —C(S)SR11, where R11 is as previously defined; andj) R15, where R15 is selected from; a. -M-R11, where R11 is as previously defined and M is selected from; i. C1-C8 alkyl;ii. Substituted C1-C8 alkyl;iii. C2-C8 alkenyl;iv. Substituted C2-C8 alkenyl;v. C2-C8 alkynyl;vi. Substituted C2-C8 alkynyl;vii. C3-C12 cycloalkyl; andviii. Substituted C3-C12 cycloalkyl;b. -M-NR13R14, where R13, R14 and M are as previously defined;c. -M-S(O)mR11, where m=0, 1, or 2; M and R11 are as previously defined;d. -M-OR11, where M and R11 are as previously defined;e. -M-C(O)R11, where M and R11 are as previously defined;f. -M-OC(O)R12, where M and R12 are as previously defined;g. -M-OC(O)OR12, where M and R12 are as previously defined;h. -M-NR17C(O)R12, where R17 is R11, M and R12 are as previously defined;i. -MNR17C(O)OR12, where R17, M and R12 are as previously defined;j. -M-C(O)NR13R14, where R13, M and R14 are as previously defined;k. -M-C(O)N(R17)—OR11, where R17, M and R11 are as previously defined;l. -M-OC(O)NR13R14, where R13, M and R14 are as previously defined;m. -M-NR17C(O)NR13R14, where M, R13, R17 and R14 are as previously defined;n.		

	-M-C(S)SR11, where M and R11 are as previously defined;o. -M-OC(S)SR12, where M and R12 are as previously defined;p. -M-NR17C(O)SR12, where M, R17 and R12 are as previously defined;q. -M-SC(O)NR13R14, where M, R13 and R14 are as previously defined;r. -M-CH═N—OR11, where M and R11 are as previously defined; ands. -M-CH═N—NR13R14, where M, R13 and R14 are as previously defined;B is ethyl, 1-hydroxyethyl, isopropyl or n-propyl;X is OR1 or SR1, where R1 is as previously defined;W is absent, —O— or —S(O)m—, where m=0, 1 or 2;R3 is R1, where R1 is as previously defined;R4N is selected from methyl, ethyl, allyl and propyl; andR4 is —(CH2)n1-C(R41)(R42)—W1—R1, where n1=0, 1 or 2; W1 is absent, —O—, or —S(O)m—, where m=0, 1 or 2; R41 and R42 are independently selected from: hydrogen, methyl, ethyl, allyl, propyl or isopropyl; and R1 is as previously defined.

□ US8367053

Cyclosporin analogues			
문헌번호 (문헌일)	US8367053 (2013-02-05)	출원번호 (출원일)	12/832357 (2010-07-08)
출원인	ENANTA PHARM (US)	기술분류	Flaviviridae/화합물
요약	The present invention provides novel cyclosporin analogue compounds, pharmaceutical compositions comprising these compounds and methods of using these compounds for the treatment of disorders and diseases, including immune disorders, inflammatory disorders and viral infections.		
대표청구항	1. A compound represented by the formula (I): [Image]where:A is [Image] where, R1 is selected from: a) R11, where R11 is selected from: 1) Hydrogen;2) Deuterium;3) C1-C8 alkyl;4) Substituted C1-C8 alkyl;5) C2-C8 alkenyl;6) Substituted C2-C8 alkenyl;7) C2-C8 alkynyl;8) Substituted C2-C8 alkynyl;9) C3-C12 cycloalkyl;10) Substituted C3-C12 cycloalkyl;11) Aryl;12) Substituted aryl;13) Heterocycloalkyl;14) Substituted heterocycloalkyl;15) Heteroaryl; and16) Substituted heteroaryl;b) —C(O)OR11, where R11 is as previously defined;c) —C(O)R11, where R11 is as previously defined;d) —C(O)OCH2—V—R12, where V is —O— or —S— and R12 is selected from: 1) C1-C8 alkyl;2) Substituted C1-C8 alkyl;3) C2-C8 alkenyl;4) Substituted C2-C8 alkenyl;5) C2-C8 alkynyl;6) Substituted C2-C8 alkynyl;7) C3-C12 cycloalkyl;8) Substituted C3-C12 cycloalkyl;9) Aryl;10) Substituted aryl;11) Heterocycloalkyl;12) Substituted heterocycloalkyl;13) Heteroaryl; and14) Substituted heteroaryl;e) —C(O)N(R13)(R14), where R13 and R14 are independently selected from R11 and R11 is as previously defined or R13 and R14, taken together with the nitrogen atom to which they are attached, form a substituted or unsubstituted heterocycloalkyl;f) —C(O)SR11, where R11 is as previously defined;g) —C(S)OR11, where R11 is as previously defined;h) —C(O)OCH2OC(O)R12, where R12 is as		

	previously defined;i) —C(S)SR11, where R11 is as previously defined; andj) R15, where R15 is selected from: 1) -M-R11, where R11 is as previously defined and M is selected from: i. C1-C8 alkyl;ii. Substituted C1-C8 alkyl;iii. C2-C8 alkenyl;iv. Substituted C2-C8 alkenyl;v. C2-C8 alkynyl;vi. Substituted C2-C8 alkynyl;vii. C3-C12 cycloalkyl; andviii. Substituted C3-C12 cycloalkyl;2) -M-NR13R14, where R13 R14 and M are as previously defined;3) -M-S(O)mR11, where m=0, 1, or 2; M and R11 are as previously defined;4) -M-OR11, where M and R11 are as previously defined;5) -M-C(O)Ru, where M and R11 are as previously defined;6) -M-OC(O)R12, where M and R12 are as previously defined;7) -M-OC(O)O R12, where M and R12 are as previously defined;8) -M-NR17C(O)R12, where R17 is R11,M and R12 are as previously defined;9) -M-NR17C(O)O R12, where R17, M and R12 are as previously defined;10) -M-C(O)NR13 R14, where R13, M and R14 are as previously defined;11) -M-C(O)N(R17)—OR11, where R17, M and R11 are as previously defined;12) -M-OC(O)NR13 R14, where R13, M and R14 are as previously defined;13) -M-NR17C(O)NR13 R14, where M, R13, R17 and R14 are as previously defined;14) -M-C(S)S Ru, where M and R11 are as previously defined;15) -M-OC(S)S R12, where M and R12 are as previously defined;16) -M-NR17C(O)S R12, where M, R17 and R12 are as previously defined;17) -M-SC(O)NR13 R14, where M, R13 and R14 are as previously defined;18) -M-CH═N—O R11, where M and R11 are as previously defined; and19) -M-CH═N—NR13 R14, where M, R13 and R14 are as previously defined;B is ethyl, 1-hydroxyethyl, isopropyl or n-propyl;X is OR1 or SR1, where R1 is as previously defined;W is absent, or —O—, or —S(O)m—, where m=0, 1 or 2;R3 is R11 or —(CH2)n1-C(R41)(R42)—W1—R1, where n1=0, 1, or 2; W1 is absent, —O—, or —S(O)m—, where m=0, 1, or 2; R41 and R42 are independently selected from: hydrogen, methyl, ethyl, allyl, propyl, and isopropyl; R1 is as previously defined; andR4 is R1, where R1 is as previously defined.

□ US8685917

Cyclosporin analogues			
문헌번호 (문헌일)	US8685917 (2014-04-01)	출원번호 (출원일)	12/832316 (2010-07-08)
출원인	ENANTA PHARM (US)	기술분류	Flaviviridae/화합물
요약	The present invention provides novel cyclosporin analogue compounds, pharmaceutical compositions comprising these compounds and methods of using these compounds for the treatment of disorders and diseases, including immune disorders, inflammatory disorders and viral infections.		
대표청구항	1. A compound represented by the formula (I); [Image]or a pharmaceutically acceptable salt thereof,where:A is [Image]where, R1 is selected from: a) R11, where R11 is selected from: 1) Hydrogen;2) Deuterium;3) C1-C8 alkyl;4) Substituted C1-C8		

	alkyl;5) C2-C8 alkenyl;6) Substituted C2-C8 alkenyl;7) C2-C8 alkynyl;8) Substituted C2-C8 alkynyl;9) C3-C12 cycloalkyl;10) Substituted C3-C12 cycloalkyl;11) Aryl;12) Substituted aryl;13) Heterocycloalkyl;14) Substituted heterocycloalkyl;15) Heteroaryl; and16) Substituted heteroaryl;b) —C(O)OR11, where R11 is as previously defined;c) —C(O)R11, where R11 is as previously defined;d) —C(O)OCH2—V—R12, where V is —O— or —S— and R12 is selected from: 1) C1-C8 alkyl;2) Substituted C1-C8 alkyl;3) C2-C8 alkenyl;4) Substituted C2-C8 alkenyl;5) C2-C8 alkynyl;6) Substituted C2-C8 alkynyl;7) C3-C12 cycloalkyl;8) Substituted C3-C12 cycloalkyl;9) Aryl;10) Substituted aryl;11) Heterocycloalkyl;12) Substituted heterocycloalkyl;13) Heteroaryl; and14) Substituted heteroaryl;e) —C(O)N(R13)(R14), where R13 and R14 are independently selected from R11 and R11 is as previously defined or R13 and R14 combined together with the N which attached to is substituted or unsubstituted heterocycloalkyl;f) —C(O)SR11, where R11 is as previously defined;g) —C(S)OR11, where R11 is as previously defined;h) —C(O)OCH2OC(O)R12, where R12 is as previously defined;i) —C(S)SR11, where R11 is as previously defined; andj) R15, where R15 is selected from: 1) -M-R11, where R11 is as previously defined and M is selected from: i. C1-C8 alkyl;ii. Substituted C1-C8 alkyl;iii. C2-C8 alkenyl;iv. Substituted C2-C8 alkenyl;v. C2-C8 alkynyl;vi. Substituted C2-C8 alkynyl;vii. C3-C12 cycloalkyl; andviii. Substituted C3-C12 cycloalkyl;2) -M-NR13R14, where R13, R14 and M are as previously defined;3) -M-S(O)mR11, where m is 0, 1, or 2; M and R11 are as previously defined;4) -M-OR11, where M and R11 are as previously defined;5) -M-C(O)R11, where M and R11 are as previously defined;6) -M-OC(O)R12, where M and R12 are as previously defined;7) -M-OC(O)OR12, where M and R12 are as previously defined;8) M-NR17C(O)R12, where R17 is R11, M and R12 are as previously defined;9) MNR17C(O)OR12, where R17, M and R12 are as previously defined;10) -M-C(O)NR13 R14, where R13, M and R14 are as previously defined;11) -M-C(O)N(R17)—OR11, where R17, M and R11 are as previously defined;12) -M-OC(O)NR13 R14, where R13, M and R14 are as previously defined;13) -M-NR17C(O)NR13 R14, where M, R13, R17 and R14 are as previously defined;14) -M-C(S)S R11, where M and R11 are as previously defined;15) -M-OC(S)S R12, where M and R12 are as previously defined;16) -M-NR17C(O)S R12, where M, R17 and R12 are as previously defined;17) -M-SC(O)NR13R14, where M, R13 and R14 are as previously defined;18) -M-CH═N—OR11, where M and R11 are as previously defined; and19) -M-CH═N—NR13 R14, where M, R13 and R14 are as previously defined;B is ethyl, 1-hydroxyethyl, isopropyl or n-propyl;X is OR1 or SR1, where R1 is as previously defined;W is absent, —O— or —S(O)m—, where m=0, 1, or 2;R3 is independently selected from R1;R3N is selected from ethyl, n-propyl, isopropyl, allyl, 2-hydroxyethyl, 3-hydroxypropyl, methoxymethyl, 2-methoxylethyl, 3-methoxypropyl, ethoxymethyl, 2-ethoxyethyl 3-ethoxypropyl, and benzyl;R4N is selected from methyl, ethyl, allyl and propyl; andR4 is —(CH2)n1—C(R41)(R42)—W1—R6, where n1=0; W1 is —O— or —S(O)m—, where m=0, 1, or 2; R41 and R42 are independently selected from: hydrogen or methyl or ethyl or allyl, or propyl, or isopropyl; and R6 is R1 provided that R6 is not hydrogen or deuterium.

□ US8481483

Cyclosporin analogues			
문헌번호 (문헌일)	US8481483 (2013-07-09)	출원번호 (출원일)	12/708671 (2010-02-19)
출원인	ENANTA PHARM (US)	기술분류	Flaviviridae/화합물
요약	The present invention provides cyclosporin analogues of formula I, and compositions comprising these compounds, as well as processes for their preparation, intermediates in their synthesis, and methods of use thereof for prevention of organ transplantation rejection, the treatment of immune disorders and inflammation, and treatment of viral (particularly hepatitis C viral) infection.		
대표청구항	1. A compound represented by the formula (I): [Image]or a pharmaceutically acceptable salt, ester or prodrug thereof,wherein:A is [Image] where R1 is selected from: a) R11, which is selected from: 1) Hydrogen;2) Deuterium;3) C1-C8 alkyl;4) Substituted C1-C8 alkyl;5) C2-C8 alkenyl;6) Substituted C2-C8 alkenyl;7) C2-C8 alkynyl;8) Substituted C2-C8 alkynyl;9) C3-C12 cycloalkyl;10) Substituted C3-C12 cycloalkyl;11) Aryl;12) Substituted aryl;13) Heterocycloalkyl;14) Substituted heterocycloalkyl;15) Heteroaryl; and16) Substituted heteroaryl;b) —C(O)OR11;c) —C(O)R11;d) —C(O)OCH2—V—R12, where V is —O— or —S— and R12 is selected from: 1) C1-C8 alkyl;2) Substituted C1-C8 alkyl;3) C2-C8 alkenyl;4) Substituted C2-C8 alkenyl;5) C2-C8 alkynyl;6) Substituted C2-C8 alkynyl;7) C3-C12 cycloalkyl;8) Substituted C3-C12 cycloalkyl;9) Aryl;10) Substituted aryl;11) Heterocycloalkyl;12) Substituted heterocycloalkyl;13) Heteroaryl; or14) Substituted heteroaryl;e) —C(O)N(R13)(R14), where R13 and R14 are independently selected from R11 or R13 and R14 are taken together with the nitrogen atom to which they are attached to form a substituted or unsubstituted heterocycloalkyl;f) —C(O)SR11;g) —C(S)OR11;h) —C(O)OCH2OC(O)R12;i) —C(S)SR11; andj) R15, where R15 is selected from: 1) -M-R11, where M is selected from: i. C1-C8 alkyl;ii. Substituted C1-C8 alkyl;iii. C2-C8 alkenyl;iv. Substituted C2-C8 alkenyl;v. C2-C8 alkynyl;vi. Substituted C2-C8 alkynyl;vii. C3-C12 cycloalkyl;viii. Substituted C3-C12 cycloalkyl;2) -M-NR16R11, where R16 is R11 or R16 and R11 are taken together with the nitrogen atom to which they are attached to form a substituted or unsubstituted heterocycloalkyl;3) -M-S(O)mR11, where m=0, 1, or 2;4) -M-OR11;5) -M-C(O)R11;6) -M-OC(O)R12;7) -M-OC(O)OR12d;8) -M-NR17C(O)R12, where R17 is R11;9) -MNR17C(O)OR12;10) -M-C(O)NR16R11;11) -M-C(O)N(R16)—OR11;12) -M-OC(O)NR16R11;13) -M-NR17C(O)NR16R11, where M, R11, R17 and R16 are as previously defined or R16 and R11 are taken together with the nitrogen atom to which they are attached to form a substituted or unsubstituted heterocycloalkyl;14) -M-C(S)SR11;15) -M-OC(S)SR12;16) -M-NR17C(O)SR12;17) -M-SC(O)NR16R11, where M, R11 and R16 are as previously defined or R16 and R11 are taken together with the nitrogen atom to which they are attached to form a substituted or unsubstituted heterocycloalkyl;18) -M-CH═N—OR11; and19) -M-CH═N—NR16R11, where M, R11 and R16 are as previously defined or R16 and R11 are taken together with the		

	nitrogen atom to which they are attached to form a substituted or unsubstituted heterocycloalkyl;B is ethyl, isopropyl or n-propyl;X is OR1 or SR1, where R1 is as previously defined;R3 is —(CH2)n—W—R1, where n=0, 1 or 2; and W is absent, —O—, or —S(O)m—, where m=0, 1 or 2;R4N is selected from methyl, ethyl, allyl and propyl;R4 is —(CH2)n1—C(R41)(R42)—W1—R1, where n1=0, 1 or 2; and W1 is absent, —O— or —S(O)m—, where m=0, 1, or 2;R41 and R42 are independently selected from hydrogen, methyl, ethyl, allyl, propyl and isopropyl; andR5 is selected from: a) R11, provided that R11 is not isopropyl; andb) —C(R51)(R52)—W2—R1, where R51 and R52 are independently selected from:hydrogen, methyl, ethyl, allyl, propyl and isopropyl and W2 is —O— or —S(O)m—, where m=0, 1 or 2.

□ US8999969

Anti-RSV compounds			
문헌번호 (문헌일)	US8999969 (2015-04-07)	출원번호 (출원일)	13/383180 (2010-07-07)
출원인	GILEAD (US)	기술분류	Paramyxoviridae/화합물
요약	The present invention relates to anti-RSV compounds of Formula (I) and methods for use of the compounds in the treatment and prevention of RSV infection.		
대표청구항	1. The present invention provides a compound of Formula I: [Image]wherein A is aryl or heteroaryl;R1 is selected from alkyl, alkoxy, haloalkyl, aryl, heteroaryl, heterocyclyl, and cycloalkyl, said heterocyclyl is optionally substituted by one to three substituents independently selected from the group consisting of halo, hydroxyl, haloalkyl, alkoxy, alkyl, alkoxy-alkyl-, hydroxyl-alkyl-, CN, and alkyl-NH—: said aryl or heteroaryl is optionally substituted by one to three substituents independently selected from the group consisting of halo, cyano, nitro, hydroxyl, alkyl, alkoxy, and alkyl-NH—, with the proviso that when A is aryl, R1 is not unsubstituted aryl;R2 is selected from hydrogen, alkyl, alkoxy, amino, alkyl-NH—, CN, alkyl-SO2—, and halo;R3 is selected from hydrogen, alkyl, heterocyclyl, heteroaryl, heteroaryl-alkyl- and cycloalkyl, wherein said alkyl is optionally substituted by one substituent selected from the group consisting of NH2—C(O)—, halo, hydroxyl, NH2—SO2—, alkoxy-alkyl-, heterocyclyl; aryl, heteroaryl, CN, and alkyl-NH—;R4 is selected from hydrogen, alkyl and haloalkyl;R3 and R4 taken together with the nitrogen atom to which they are attached optionally form a 3- to 7-membered ring;R5 is selected from hydrogen, alkyl, alkoxy, haloalkyl, and halo; ora pharmaceutically acceptable salt thereof.		

□ US8476225

Antiviral compounds			
문헌번호 (문헌일)	US8476225 (2013-07-02)	출원번호 (출원일)	12/958086 (2010-12-01)
출원인	GILEAD (US)	기술분류	Flaviviridae/화합물
요약	The invention is related to anti-viral compounds, compositions containing such compounds, and therapeutic methods that include the administration of such compounds, as well as to processes and intermediates useful for preparing such compounds.		
대표청구항	1. A compound of formula 1: [Image]or a pharmaceutically acceptable salt thereof;wherein:R1 is R2—, R2—C(O)—, R2—O—C(O)— or R2—N(H)—C(O)—R2 is optionally substituted C1-C8 alkyl, optionally substituted C3-C10 cycloalkyl, optionally substituted C7-C14 cycloalkylalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heterocycle or optionally substituted heterocyclylalkyl;R3 is optionally substituted C1-C8 alkyl, optionally substituted C3-C10 cycloalkyl, optionally substituted C7-C14 cycloalkylalkyl, optionally substituted heterocyclylalkyl, or optionally substituted heterocycle, or R3 and R8, along with the atoms that connect them, form a 12 to 18 membered saturated, partially unsaturated or unsaturated heterocycle wherein the 12 to 18 membered saturated, partially unsaturated or unsaturated heterocycle is optionally substituted with C1-C6 alkyl, C1-C6-haloalkyl, halo, oxo or cyano and wherein 0, 1, 2, or 3 carbon atoms of R3 are optionally replaced by O, N, or S;R4 is R6—, R6—R5—, R6—W—, R6—W—C(O)—, R6—C(O)—, R6—C(O)—W—, R6—W—O—C(O)—, R6—S(O)m—, R6—W—S(O)m—, R6—N(H)—C(O)—, R6—N(H)—S(O)m—, R6—R5—S(O)m—, or R6—N(H)—R5—;R5 is optionally substituted arylene or optionally substituted heteroarylene;R6 is optionally substituted C3-C10 cycloalkyl, optionally substituted aryl or optionally substituted heterocycle;m is 0, 1 or 2:W is C1-C4 alkylene, C2-C4 alkenylene, or C2-C4alkynylene wherein the C1-C4 alkylene, C2-C4 alkenylene, or C2-C4 alkynylene is optionally substituted with C1-C3-alkyl, C1-C3-haloalkyl, cyano or halo;R7 is: [Image]R8 is C1-C4 alkyl, C2-C4 alkenyl or C2-C4-alkynyl wherein the C1-C4 alkyl, C2-C4 alkenyl or C2-C4-alkynyl is optionally substituted with halo or cyano;R9 is R10, R10—NH— or R10—O—R10 is C1-C4 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl wherein the C1-C4 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl, cyano or halo;R11 is C1-C4 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl wherein the C1-C4 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl, C1-C4-alkylthio, cyano or halo;each R12 is independently H, C1-C6 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl wherein the C1-C6 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl, cyano or halo;R13 is H, OH, OR14, C1-C4 alkyl, C3-C7 cycloalkyl, C4-C12 cycloalkylalkyl, aryl, arylalkyl, heterocycle or heterocyclylalkyl		

	wherein the C1-C4 alkyl, C3-C7 cycloalkyl, C4-C12 cycloalkylalkyl, aryl, arylalkyl, heterocycle or heterocyclylalkyl is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl cyano or halo;R14 is R15—, R15—C(O)—, R15—O—C(O)—, or R15O—C(O)—X—R15 is C1-C6 alkyl, C3-C7 cycloalkyl, C7-C12 cycloalkylalkyl, aryl, arylalkyl, heterocycle, or heterocyclylalkyl wherein the C1-C6 alkyl, C3-C7 cycloalkyl, or C7-C12 cycloalkylalkyl is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl, cyano or halo;X is C1-C5 alkylene or C3-C6 spiroalkylene;R16 is H, R17—C(O)—, R17—O—C(O)— or R17O—C(O)—X—;each R17 is independently H, C1-C4 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl wherein the C1-C4 alkyl, C3-C7 cycloalkyl or C4-C9 cycloalkylalkyl is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl, cyano or halo, or two R17, along with the carbon to which they are attached, form a 3-6 membered spirocyclic carbocycle or heterocycle wherein any carbon of said carbocycle or heterocycle is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl, cyano or halo and any nitrogen of said heterocycle is optionally substituted with C1-C2-alkyl, C1-C2-haloalkyl, C3-C5 cycloalkyl or C1-C3 acyl, or, taken together, two instances of R17 together with the carbon atom to which they are attached form a carbonyl group.

□ US9737478

Treatment of malaria			
문헌번호 (문헌일)	US9737478 (2017-08-22)	출원번호 (출원일)	12/881124 (2010-09-13)
출원인	NATIONAL INSTITUTES OF HEALTH (US)	기술분류	anti-malaria/화합물
요약	The invention contemplates compositions for the treatment of malaria comprising an anti-malaria drug and an adjuvant which promotes vasodilation and methods of using same.		
대표청구항	1. A method for the treatment of cerebral malaria, said method comprising simultaneously or serially administering to said mammal a therapeutically effective amount of an artemisinin or an artemisinin derivative, and nimodipine in a therapeutically effective amount to promote vasodilation.		

□ US8895499

β-hairpin peptidomimetics			
문헌번호 (문헌일)	US8895499 (2014-11-25)	출원번호 (출원일)	13/814398 (2010-08-05)
출원인	POLYPHOR (CH)	기술분류	Orthomyxoviridae/화합물
요약	β-Hairpin peptidomimetics of the general formula Cyclo(-Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11-Xaa12-Xaa13-Xaa14-), enantiomers and pharmaceutically acceptable salts thereof, with Xaa1-Xaa14 being amino acid residues of certain types which are defined in the description and the claims, have anti-infective activity, e.g. to selectively inhibit the growth of or to kill microorganisms such as Bacillus subtilis and/or Shigella boydii. They can be used as medicaments to treat or prevent infections or as disinfectants for foodstuffs, cosmetics, medicaments or other nutrient-containing materials. These peptidomimetics can be manufactured by a process which is based on a mixed solid- and solution phase synthetic strategy.		
대표청구항	1. Compounds of the general formula Cyclo(-Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11-Xaa12-Xaa13-Xaa14-), wherein the amino acid residues Xaa1 to Xaa14 are: Xaa1: amino acid residue of type C, or of type D, as described herein below;Xaa2: amino acid residue of type E, as described herein below;Xaa3: amino acid residue of type C, or of type F, as described herein below;Xaa4: amino acid residue of type C, or of type E, as described herein below;Xaa5: amino acid residue of type C, as described herein below;Xaa6: amino acid residue of type E, as described herein below; or the D-isomer of an amino acid residue of type E, as described herein below;Xaa7: amino acid residue of type F, as described herein below, or Gly;Xaa8: amino acid residue of type E, as described herein below;Xaa9: amino acid residue of type E, as described herein below;Xaa10: amino acid residue of type C, or of type F, as described herein below;Xaa11: amino acid residue of type E, or of type F, as described herein below;Xaa12: amino acid residue of type C, or of type E, or of type F, as described herein below;Xaa13: amino acid residue of formula -A-CO—, as described herein below;Xaa14: amino acid residue of formula —B—CO—, as described herein below;with the proviso that if Xaa9 is an amino acid residue of type E,as described herein below,then Xaa9 is Dab; and/or if Xaa12 is an amino acid residue of type F,as described herein below,then Xaa12 is Gln; and/orat least two of the amino acid residues of Cyclo(-Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11-Xaa12-Xaa13-Xaa14-) are non-canonical amino acid residues,as described herein below;orcompounds of the general formula Cyclo(-Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11-Xaa12-Xaa13-Xaa14-), wherein the amino acid residues Xaa1 to Xaa14 are: Xaa1: amino acid residue of type D, as described herein below;Xaa2: amino acid residue of type E, as described herein below;Xaa3: amino acid residue of type C, or of type F, as		

	described herein below;Xaa4: amino acid residue of type E, as described herein below;Xaa5: amino acid residue of type C, as described herein below;Xaa6: amino acid residue of type E, or the D-isomer of an amino acid residue of type E, as described herein below;Xaa7: amino acid residue of type C, or of type D, or of type E, or of type F,as described herein below, or Gly;Xaa8: amino acid residue of type F, as described herein below;Xaa9: amino acid residue of type E, as described herein below;Xaa10: amino acid residue of type C, or of type D, or of type F, as described herein below;Xaa11: amino acid residue of type E, or or type F, as described herein below;Xaa12: amino acid residue of type C or of type E, as described herein below;Xaa13: amino acid residue of formula -A-CO—, as described herein below;Xaa14: amino acid residue of formula —B—CO—, as described herein below;with the proviso that if Xaa7 is an amino acid residue of type F,as described herein below,then Xaa7 is Gln or Thr; and/or if Xaa10 is an amino acid residue of type F,as described herein below,then Xaa10 is Ser; and/orat least one of the amino acid residues of Cyclo(-Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11-Xaa12-Xaa13-Xaa14-) is a non-canonical amino acid residue,as described herein below;orcompounds of the general formula Cyclo(-Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11-Xaa12-Xaa13-Xaa14-), wherein the amino acid residues Xaa1 to Xaa14 are: Xaa1: amino acid residue of type D, as described herein below;Xaa2: amino acid residue of type E, as described herein below;Xaa3: amino acid residue of type C, as described herein below;Xaa4: amino acid residue of type E, as described herein below;Xaa5: amino acid residue of type C, as described herein below;Xaa6: amino acid residue of type E, as described herein below, or the D-isomer of an amino acid residue of type E, as described herein below;Xaa7: amino acid residue of type F, as described herein below;Xaa8: amino acid residue of type D, as described herein below;Xaa9: amino acid residue of type E, as described herein below;Xaa10: amino acid residue of type F, as described herein below;Xaa11: amino acid residue of type E, as described herein below;Xaa12: amino acid residue of type E, as described herein below;Xaa13: amino acid residue of formula -A-CO—, as described herein below;Xaa14: amino acid residue of formula —B—CO—, as described herein below;orcompounds of the general formula Cyclo(-Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11-Xaa12-Xaa13-Xaa14- wherein the amino acid residues Xaa1 to Xaa14 are: Xaa1: amino acid residue of type D, as described herein below;Xaa2: amino acid residue of type E, as described herein below;Xaa3: amino acid residue of type E, as described herein below;Xaa4: amino acid residue of type E, as described herein below;Xaa5: amino acid residue of type C, as described herein below, or Gly;Xaa6: amino acid residue of type E, or of type F, as described herein below, or the D-i...

□ KR10-1021830

크레이스토카릭스 오페르쿠라투스로부터 얻은 조류, 돼지 인플루엔자 및 신종플루에 대한 항바이러스제			
문헌번호 (문헌일)	KR10-1021830 (2011-03-07)	출원번호 (출원일)	10-2010-0079391 (2010-08-17)
출원인	중앙백신연구소 (KR)	기술분류	Orthomyxoviridae/화합물
요약	본 발명은 크레이스토카릭스 오페르쿠라투스 유래의 뉴라미니데이즈 효소(neuraminidase)를 저해하는 화합물 및 이를 유효성분으로 포함하는 조류 및 돼지 인플루엔자와 신종플루의 예방과 치료에 사용하는 조성물에 관한 것이다.		
대표청구항	크레이스토카릭스 오페르쿠라투스(Cleistocalyx operculatus)를 에탄올 또는 메탄올 중에서 선택된 1종 이상의 추출용매 또는 이들 추출용매의 수용액으로 추출한 추출물로서, 7-Hydroxy-5-methoxy-6,8-dimethylisoflavone,5,7-Dihydroxy-6,8-dimethyldihydroflavonol,2,7-Dihydroxy-5-methoxy-6,8-dimethylflavanone,4,2',4'-Trihydroxy-6'-methoxy-3',5'-dimethylchalcone,2',4'-Dihydroxy-6'-methoxy-3',5'-dimethylchalcone,7-Hydroxy-5-methoxy-6,8-dimethylfavanone2',4'-Dihydroxy-3'-methyl-6'-methoxychalcone,6-Formyl-8-methyl-7-O-methylpinocembrin,(2S)-8-Formyl-5-hydroxy-7-methoxy-6-methylflavanone, 및,5,7-Dihydroxy-6,8-dimethylfavanone,2,2',4'-Trihydroxy-6'-methoxy-3',5'-dimethylchalcone의 화합물 중 한 가지 이상을 포함하는 것을 특징으로 하는 조류 및 돼지 인플루엔자와 신종플루 관련 질환의 예방 또는 치료용 약학조성물.		

□ KR10-1340260

(-)-카르본, (+)-카르본, 제라니올 및 추가의 정유 성분의 복합물을 포함하는 생체내 치료 용도를 위한 바이러스 억제제 조성물			
문헌번호 (문헌일)	KR10-1340260 (2013-12-04)	출원번호 (출원일)	10-2012-7027321 (2011-03-28)
출원인	CESA ALLIANCE S.A. (LU)	기술분류	Coronaviridae/화합물
요약	본 발명은 DNA 피막 바이러스, DNA 무피막 바이러스, RNA 피막 바이러스 and RNA 무피막 바이러스에 의해 발병되는 질병의 치료 및 예방을 위한, 이하의 성분: R-(-)-2-메틸-5-(프로프-1-엔-2-일)-시클로헥스-2-에논((-) 카르본이라고도 함) 및 S-(+)-2-메틸-5-(프로프-1-엔-2-일)-시클로헥스-2-에논((+) 카르본이라고도 함) 및 (2E)-3,7-디메틸옥타-2,6-디엔-1-올(트랜스-제라니올이라고도 함)을 정유 성분 중에서 선택한 1종 이상의 성분과 함께 포함하는 항바이러스 조성물에 관한 것이다.		
대표청구항	(i) (-)-카르본, (ii) (+)-카르본, (iii) 트랜스-제라니올, 및 (iv) 유제놀 메틸에테르, 리날룰옥시드, (시스+트랜스)-1,2(+)-리모넨 옥시드, (+/-)-이소멘톨, 유제놀, 트랜스-네롤리돌, (시스+트랜스)-네롤리돌 및 라벤둘롤에서 선택되는 1종 이상의 성분을 약학적 유효 농도로 포함하는, DNA 피막 바이러스, DNA 무피막 바이러스, RNA 피막 바이러스 및 RNA 무피막 바이러스에 의해 발병된 질환을 치료 및 예방하는 데 사용하기 위한 조성물로서, 상기 질환은 (기관지) 폐렴, 3일 열 피진, 급성 및 만성		

	간염, 급성 발열, 데저트 실드 로즈데일 멕시코 노르워크 하와이 스노우 마운틴 사우스햄튼 바이러스(Desert Shield Lordsdale Mexico Norwalk Hawaii Snow Mountain Southampton)와 같은 균주에 의해 발병된 급성 위장염, 휴스톤/86 휴스톤/90 런던 29845 맨체스터 파크빌 사포로(Houston/86 Houston/90 London 29845 Manchester Parkville Sapporo) 바이러스와 같은 균주에 의해 발병된 급성 위장염, 급성 간염, 급성 호흡 곤란 증후군, AIDS, 아르헨티나 출혈열, 관절통, 조류 독감, 볼리비아 출혈열, 브라질 출혈열, 수두, 만성 간염, 혼수, 일반 감기 감염, 일반 감기 증후군, 선천성 감염, 결막염, 전염성 농창, 전염성 농포성 피부염, 각막, 은폐성 장내 감염, 사이토메갈로바이러스 단핵구증, 뎅기 출혈열(DHF), 뎅기 쇼크 증후군(DSS), 설사, 습진, 포진상 습진, 뇌염, 뇌병증, 장염, 유행성 신장병증, 유행성 다발성관절염 및 피진, 우상표피이형성증, 엡스타인-바(Epstein-Barr) 바이러스 감염, 피진, 소아 피진, 치명적 가족성 불면증, 발열성 뇌염, 발열성 질병, 발열, 이전의 인간 에코바이러스 혈청형 22 23, 위장염, 위장 감염 세포질내 봉입체, 여성생식기 감염, 겸상적혈구증 환자의 용혈증, 두통, 출혈열, 신증후군성 출혈열, 포진성 뇌염, 호지킨병, 인간 콕사키바이러스, 인간 콕사키바이러스 혈청형 B1-6, 인간 에코바이러스 혈청형 1-7 9 11-21 24-27 29-33, 인간 엔테로바이러스 혈청형 69, 인간 엔테로바이러스 혈청형 71(수족구병), 인간 A형 간염 바이러스(HHAV), 인간 폴리오바이러스, 인간 리노바이러스 혈청형 1 2 7 9 11 15 16 21 29 36 39 49 50 58 62 65 85 89 초급성 호흡기 질환, 인간 리노바이러스 혈청형 3 14 72, 초급성 호흡기 질환, 면역 결핍 증후군, 유아 설사, 임의의 뎅기 혈청형(1-4) 감염, 감염성 단핵구증, 관절 통증, 카포시 육종, 각결막염, 피부 병변, 류코페니아, 간경변증, 하기도 감염, 림프절병증, 반구진발진, 홍역, 뇌수막염, 단핵구증(키스병), 볼거리, 근육통, 심근염, 신장병증, 이식 환자의 신장병증, 저림증, 기회 감염, 경구 감염, 고환염, 췌장염, 광역유행병, 유두종, 마비, 신장의 지속 감염, 지속 감염, 지속 림프병증, 인두 결막염, 폐렴, 원발성 간세포 암종, 폐증후군, 공수병, 발진, 재발성 유행성 호흡기 질환, 호흡기 질환, 소아 장미진, 육종, 중증 오한성 관절통, 중증 급성 호흡기 증후군, 중증 뇌염, 대상포진, 제6병, 피부 및 점막 병변, 슬림병, 인후통, 아급성 경화성 범뇌염, 델타바이러스의 중복감염, 궤양, 상기도병, 베네수엘라 출혈열, 수포성 인두염, 피진 동반 수포성 구내염, 바이러스성 다발성관절염 및 발진, 바이러스성 사마귀, 수성 설사, 동물원성 감염증, 대상 포진, 화생, 이형성증, 역형성증, 결합조직형성증, 내암종, 독감(인플루엔자) 및 침윤성 암종으로 이루어진 군에서 선택되는 것인 조성물.

□ US8178531

Antiviral agents			
문헌번호 (문헌일)	US8178531 (2012-05-15)	출원번호 (출원일)	13/033015 (2011-02-23)
출원인	ENANTA PHARM (US)	기술분류	Flaviviridae/화합물
요약	The present invention relates to antiviral compounds of formula (I), compositions containing these compounds, processes for their preparation, intermediates in their synthesis, and their use as therapeutics for prevention of organ transplantation rejection, the treatment of immune disorders and inflammation, and treatment of viral (particularly hepatitis C viral) infection.		

대표청구항	1. A compound represented by the formula (I): [Image]or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein: Ring A and ring B are each independently selected from: a) Phenyl;b) Substituted phenyl;c) Six membered heteroaryl containing one, two or three nitrogen atoms;d) Substituted six membered heteroaryl containing one, two or three nitrogen atoms;R1 and R2 are each independently selected from: a) Hydrogen;b) Deuterium;c) Halogen;d) R11, where R11 is selected from: 1) C1-C12 alkyl;2) Substituted C1-C12 alkyl;3) C2-C12 alkenyl;4) Substituted C2-C12 alkenyl;5) C2-C12 alkynyl;6) Substituted C2-C12 alkynyl;7) C3-C12 cycloalkyl;8) Substituted C3-C12 cycloalkyl;9) Aryl;10) Substituted aryl;11) Heterocycloalkyl;12) Substituted heterocycloalkyl;13) Heteroaryl; and14) Substituted heteroaryl;e) —C(O)OR12, where R12 is selected from hydrogen or R11 where R11 as previously defined;f) —C(O)R12, where R12 is as previously defined;g) —C(O)N(R13)(R14), where R13 and R14 are independently selected from R12 and R12 is as previously defined or R13 and R14, together with the nitrogen atom to which they are attached is substituted or unsubstituted heterocycloalkyl;h) —C(O)SR12, where R12 is as previously defined;i) —C(S)OR12, where R12 is as previously defined;j) —C(S)SR12, where R12 is as previously defined;k) —OR12, where R12 is as previously defined;l) —SR12, where R12 is as previously defined; andm) —NR13R14, where R13 and R14 are as previously defined;R3, R4, R5 and R6 are independently selected from: a) Hydrogen;b) Deuterium;c) C1-C12 alkyl;d) Substituted C1-C12 alkyl;e) C2-C12 alkenyl;f) Substituted C2-C12 alkenyl;g) C2-C12 alkynyl;h) Substituted C2-C12 alkynyl;i) C3-C12 cycloalkyl;j) Substituted C3-C12 cycloalkyl;k) Aryl;l) Substituted aryl;m) Heterocycloalkyl;n) Substituted heterocycloalkyl;o) Heteroaryl; andp) Substituted heteroaryl;orR3 and R5, together with the nitrogen atom and the carbon atom to which they are attached, and/or R4 and R6, together with the nitrogen atom and the carbon atom to which they are attached form a substituted or unsubstituted heterocycloalkyl;Ra and Rb are independently selected from: a) Hydrogen;b) R11;c) —C(O)O—R11, where R11 is as previously defined;d) —C(O)NHR11, where R11 is as previously defined;e) Ra and Rb combined together with the N which attached to is substituted or unsubstituted heterocycloalkyl;R7 is selected from: a) R11, where R11 is as previously defined;b) —OR11, where R11 is as previously defined;c) —SR11, where R11 is as previously defined; andd) —NR13R14, where R13 and R14 are as previously defined;D is selected from: a) C1-C12 alkylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;b) Substituted C1-C12 alkylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;c) C2-C12 alkenylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;d) Substituted C2-C12 alkenylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;e) C2-C12 alkynylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;f) Substituted C2-C12 alkynylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;g) C3-C12 cycloalkylene;h) Substituted C3-C12 cycloalkylene;i) Heterocycloalkylene; andj) Substituted heterocycloalkylene;E is absent or selected from: a) C1-C12 alkylene;b) Substituted C1-C12 alkylene;c) C3-C12 cycloalkylene;d)

	C3-C12 cycloalkylene-M-, where M is selected from optionally substituted C1-C12 alkylene, or optionally substituted C2-C12 alkenylene, or optionally substituted C2-C12 alkynylene, and optionally substituted C3-C12 cycloalkylene, each of which contains 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;e) Substituted C3-C12 cycloalkylene;f) Substituted C3-C12 cycloalkylene-M, where M is as previously defined;g) Heterocycloalkylene;h) Heterocycloalkylene-M-, where M is as previously defined;i) Substituted heterocycloalkylene; andj) Substituted heterocycloalkylene-M-, where M is as previously defined;L is absent, or selected from: a) —O—;b) —N(R12)—, where R12 is as previously defined;c) —N(C(O)R11)—, where R11 is as previously defined;d) —N(C(O)OR11)—, where R11 is as previously defined;e) —S(O)n—, where n=0, 1, or 2;f) —C(O)—;g) —C(O)NH—;h) —OC(O)NH—;i) —OC(S)NH—;j) —SC(S)NH—;k) —NHC(O)NH—;l) —NHC(S)NH—;m) —O-M-, where M is as previously defined;n) —O-M-OC(O)NH—, where M is as previously defined;o) —S-M-OC(O)NH—, where M is as previously defined;p) —S(O)n-M-, where n=0, 1 or 2 and M is as previously defined;q) —OC(O)NH-M-, where M is as previously defined;r) —OC(S)NH-M-, where M is as previously defined;s) —NHC(O)NH-M-, where M is as previously defined;t) —NHC(S)NH-M-, where M is as previously defined;R8 is R11, where R11 is as previously defined;R9 is selected from: a) Aryl;b) Substituted aryl;c) Heteroaryl; andd) Substituted heteroaryl;m is 0, 1, 2, 3 or 4.

□ US8623814

Antiviral agents			
문헌번호 (문헌일)	US8623814 (2014-01-07)	출원번호 (출원일)	13/032942 (2011-02-23)
출원인	ENANTA PHARM (US)	기술분류	Flaviviridae/화합물
요약	The present invention provides antiviral compounds of formula (I), as well as pharmaceutical compositions comprising these compounds, methods for synthesizing these compounds and methods of using these compounds for treating a viral infection.		
대표청구항	1. A compound represented by the formula (I): [Image]or a pharmaceutically acceptable salt, ester or prodrug thereof,wherein:Ring A and ring B are each independently selected from: a) Phenyl;b) Substituted phenyl;c) Six membered heteroaryl containing one, two or three nitrogen atoms; andd) Substituted six membered heteroaryl containing one, two or three nitrogen atoms;R1 and R2 are each independently selected from: a) Hydrogen;b) Deuterium;c) Halogen;d) R11, where is selected from: 1) C1-C12 alkyl;2) Substituted C1-C12 alkyl;3) C2-C12 alkenyl;4) Substituted C2-C12 alkenyl;5) C2-C12 alkynyl;6) Substituted C2-C12 alkynyl;7) C3-C12 cycloalkyl;8) Substituted C3-C12 cycloalkyl;9) Aryl;10) Substituted		

	aryl;11) Heterocycloalkyl;12) Substituted heterocycloalkyl;13) Heteroaryl; or14) Substituted heteroaryl;e) —C(O)OR12, where R12 is selected from hydrogen or R11 where R11 as previously defined;f) —C(O)R12, where R12 is as previously defined;g) —C(O)N(R13)(R14), where R13 and R14 are independently selected from R12 and R12 is as previously defined or R13 and R14 combined together with the N which attached to is substituted or unsubstituted heterocycloalkyl;h) —C(O)SR12, where R12 is as previously defined;i) —C(S)O R12, where R12 is as previously defined;j) —C(S)S R12, where R12 is as previously defined;k) —OR12, where R12 is as previously defined;l) —SR12, where R12 is as previously defined; andm) —NR13R14, where R13 and R14 are as previously defined;R3, R4, R5 and R6 are each independently selected from: a) Hydrogen;b) Deuterium;c) C1-C12 alkyl;d) Substituted C1-C12 alkyl;e) C2-C12 alkenyl;f) Substituted C2-C12 alkenyl;g) C2-C12 alkynyl;h) Substituted C2-C12 alkynyl;i) C3-C12 cycloalkyl;j) Substituted C3-C12 cycloalkyl;k) Aryl;l) Substituted aryl;m) Heterocycloalkyl;n) Substituted heterocycloalkyl;o) Heteroaryl; andp) Substituted heteroaryl;orR3 and R5, together with the nitrogen atom and the carbon atom to which they are attached, and/or R4 and R6, together with the nitrogen atom and the carbon atom to which they are attached independently form a substituted or unsubstituted heterocycloalkyl;Ra and Rb are independently selected from: a) Hydrogen;b) R11;c) —C(O)O—R11, where R11 is as previously defined;d) —C(O)NHR11, where R11 is as previously defined;or Ra and Rb, together with the nitrogen atom to which they are attached, form a substituted or unsubstituted heterocycloalkyl;R7 is selected from: a) R11, where R11 is as previously defined;b) —OR11, where R11 is as previously defined;c) —SR11, where R11 is as previously defined; andd) —NR13R14, where R13 and R14 are as previously defined;D and E are each independently selected from: a) C1-C12 alkylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;b) Substituted C1-C12 alkylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;c) C2-C12 alkenylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;d) Substituted C2-C12 alkenylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;e) C2-C12 alkynylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;f) Substituted C2-C12 alkynylene containing 0, 1, 2 or 3 heteroatoms independently selected from O, S and N;g) C3-C12 cycloalkylene;h) Substituted C3-C12 cycloalkylene;i) Heterocycloalkylene; andj) Substituted heterocycloalkylene;L is absent, or selected from: a) —O—;b) —N(R12)—; where R12 is as previously defined;c) —N(C(O)Rii)—; where R11 is as previously defined;d) —N(C(O)OR11)—; where R11 is as previously defined;e) —S(O)m—, where m=0, 1 or 2;f) —OC(O)NH—;g) —OC(S)NH—;h) —SC(S)NH—;i) —NHC(O)NH—;j) —NHC(S)NH—;k) —O-M-, where M is selected from optionally substituted C1-C12 alkylene, or optionally substituted C2-C12 alkenylene, or optionally substituted C2-C12 alkynylene, or optionally substituted C3-C12 cycloalkylene;l) —S(O)m-M-, where m=0, or 1, or 2 and M is as previously defined;m) —OC(O)NH-M-, where M is as previously defined;n) —OC(S)NH-M-, where M is as previously defined;o) —NHC(O)NH-M-, where M is as previously defined; andp) —NHC(S)NH-M-, where

	M is as previously defined;J is R11, where R11 is as previously defined;K is ethyl, 1-hydroxyethyl, isopropyl or n-propyl;R8 is selected from: a) Hydrogenb) C1-C12 alkyl; andc) Substituted C1-C12 alkyl;Rc is methyl, ethyl, allyl or n-propyl; andR9 is hydrogen or R11.

□ EP2615101

NUCLEOSIDE DERIVATIVES, SYNTHESIS METHODS AND USES THEREOF FOR PREPARING ANTI-TUMOR AND ANTI-VIRUS MEDICAMENTS			
문헌번호 (문헌일)	EP2615101 (2018-10-17)	출원번호 (출원일)	2011-823062 (2011-09-02)
출원인	HIGH & NEW TECHNOLOGY RESEARCH CENTER, HENAN ACADEMY OF SCIENCES (CN)	기술분류	Flaviviridae/화합물
요약	The present invention relates to the field of pharmacochemistry. Disclosed are fluorinated and azido-substituted pyrimidine nucleoside derivatives, and preparation methods and uses thereof. The structural formula is as shown (I). These compounds can be used for preparing medicaments for treating diseases such as tumors and viral infections, and can be used separately or in combination with other medicaments. The compounds also have effective activity against diseases such as tumors and viral infections, while having few side effects, and thus have potential application value.		
대표청구항	A 4'-azido-2'-deoxy-2'-β-fluoropyrimidine nucleoside derivative having the following structure: [Image] B = [Image]wherein R1 is selected from OH, NHOH, NHOCH3, NHOEt, NHOR, NROH, NROR, NHR, NRR, NH(CH2)nOH, NH(CH2)nOR, NH(CH2)nSR, N[(CH2)nOH]2, NHCH2Ar, NHCH2-Het, CN, COOH, CONH2, COOR, CSNH2, C(=NH)NH2, C(=NH)OR, C(=NH)OH, NHNH2, NHNHR, NRNH2, NRNHR, NRNRR, NHNHC(=O)NH2, NHNHC(=S)NH2, NHNHC(=O)NHR, NHNHC(=S)NR, NHC(=O)NHR, NHC(=S)NHR, NHCH2CONH2, NHCH2CONHR; alternatively, the two R groups on -NRR, NRNHR, NRNRR may join together to form a 3- to 10-membered cyclic group in which the heteroatoms are N and O or S; wherein, n = 2-8; R is C1-C8 alkyl, C2-C8 alkenyl, C2-C8 alkalkenyl, C2-C8 alkenylalkyl, C2-C8 alkynyl, C2-C8 alkalkynyl, C2-C8 alkynylalkyl, C3-C8 cycloalkyl, C3-C8 cycloalkenyl, amino acid, substituted amino acid, C1-C8 hydroxyalkyl, C2-C8 sulfanylalkyl, C1-C8 cyanoalkyl, C1-C8 aminoalkyl, C1-C8 carboxyalkyl, methoxy, methylsulfanyl, C2-C8 alkoxy, C2-C8 alkylsulfanyl, C6-C12 aralkyl, C3-C6 heterocycloalkyl; or, R is H, F, Cl, Br, I, CF3, OCF3, O-C6-C12 aryl or a O-C3-C6 heterocyclic group; wherein Ar is conjugated C5-C10 monocyclic or bicyclic aryl; Het is conjugated C5-C10 monocyclic or bicyclic aryl containing 1-3 heteroatoms selected from N, O or S; R2 is selected from H, OH, NH2, methyl, ethyl, C3-C10 alkyl, methoxy, methylsulfanyl, C2-C10 alkoxy, C2-C10 alkylsulfanyl, CH2NH2, CH2OH or CH2OR; or, a conjugated C5-C10 aromatic cyclic group with or without a R substituent mentioned above on the ring thereof, or a C3-C6 heterocycloalkyl group with or without a R substituent mentioned		

	above on the ring thereof; R3 is selected from H, CH3, CH2CH3, CH2CH2CH3, CHMe2, CH2SH, CH2CH2SH, CH2OH, CH2C6H5, CH2CONH2, CH2COOH, CH2COOR, CH2CH2CONH2, CH2CH2COOH, CH2CH2COOR, CH2CH2CH2NHC(=NH)NH2, CHMeCH2CH3, CH2CHMe2, CH2CH2CH2CH2NH2, CH2CH2SCH3, CH(OH)CH3, CH2C6H4OH-p, CH2-imidazole, CH2-indole; C6-10 alkyl, C2-10 hydroxyalkyl, C4-10 sulfanylalkyl, Ar, CH2Ar or CH2-Het, wherein there may or may not be a R substituent mentioned above on the ring of said Ar and Het groups; and Ar, Het and R groups have the same meanings as defined above; R4 is H, methyl, ethyl, C3-C10 alkyl, C6-C12 aralkyl or C3-C6 heterocycloalkyl; R5 is C1-C10 alkyl, C2-C10 alkenyl, C2-C10alkalkenyl, C2-C10 alkenylalkyl, C2-C10 alkynyl, C2-C10 alkalkynyl, C2-C10 alkynylalkyl, C1-C10 cyanoalkyl, C1-C10 aminoalkyl or C1-C10 carboxyalkyl; (CH2)nOH, (CH2)nOR, (CH2)nSR, CH2Ar, CH2CH2Ar, CH2-Het or CH2CH2-Het, wherein there may or may not be a R substituent mentioned above on the ring of said Ar and Het groups, and Ar, Het and R groups have the same meanings as defined above and wherein n = 2-8; R6 is NHR, NRR, NH(CH2)nOH, NH(CH2)nOR, NH(CH2)nSR, N[(CH2)nOH]2, NHCH2Ar, NHAr, N(CH2Ar)2, NAr2, NHCH2-Het; cyclic amino groups having 3-8 carbon atoms with or without 1-2 carbon atoms in the ring thereof being substituted with O, S, NH, NR, PO or P(O)(OH)2; wherein, R is C1-C15 alkyl, C2-C15 alkenyl, C2-C15 alkalkenyl, C2-C15 alkenylalkyl, C2-C15 alkynyl, C2-C15 alkalkynyl, C2-C15 alkynylalkyl, C3-C15 cycloalkyl, C3-C15 cycloalkenyl, C6-C12 aralkyl, C3-C6 heterocycloalkyl, hydroxyalkyl, sulfanylalkyl, cyanoalkyl, aminoalkyl or carboxyalkyl; wherein Ar, Het and R groups have the same meanings as defined above; R7 is C1-C18 alkyl, hydroxymethyl, hydroxyethyl, hydroxypropyl or C4-C10 hydroxyalkyl; CH2OR, CH2SR, Ar, Het, (CH2)1-12-Ar, (CH2)1-12-Het, or a C1-C18 alkyl with 1-3 double bonds or triple bonds or 1-3 O or S atoms in the alkyl chain; wherein Ar and Het groups are as defined above; and X = NH, O, S, or NR, with the proviso that when B = [Image] and R2 is H, R1 is not NH2 or OH; or when B = [Image] and R2 is CH3, R1 is not OH.

□ US8796319

1,2,5-oxadiazoles as inhibitors of indoleamine 2,3-dioxygenase			
문헌번호 (문헌일)	US8796319 (2014-08-05)	출원번호 (출원일)	13/294711 (2011-11-11)
출원인	INCYTE (US)	기술분류	Flaviviridae/화합물
요약	The present invention is directed to 1,2,5-oxadiazole derivatives, and compositions of the same, which are inhibitors of indoleamine 2,3-dioxygenase and are useful in the treatment of cancer and other disorders, and to the processes and intermediates for making such 1,2,5-oxadiazole derivatives.		
대표청구항	1. A method of suppressing immunosuppression or treating a disease selected from breast cancer, ovarian cancer, HIV infection, HCV infection, depression, Alzheimer's disease, Huntington's disease, trauma, age-related cataracts, organ transplant rejection, asthma, rheumatoid arthritis, multiple sclerosis, allergic inflammation, inflammatory bowel disease, psoriasis, and systemic lupus erythematosus in a		

	patient, comprising administering to said patient a therapeutically effective amount of a compound of Formula I or Formula F28: [Image]or a pharmaceutically acceptable salt thereof, wherein said treating refers to inhibiting the disease or ameliorating the disease; wherein: R1 is NH2 or CH3;R2 is Cl, Br, CF3, CH3, or CN;R3 is H or F;R4 is F, Cl, Br, or I; andn is 1 or 2.

□ KR10-1773226

치환된 다환성 카르바모일 피리돈 유도체의 프로드러그			
문헌번호 (문헌일)	KR10-1773226 (2017-08-24)	출원번호 (출원일)	10-2013-7010331 (2011-09-21)
출원인	SHIONOGI (JP)	기술분류	Orthomyxoviridae/화합물
요약	본 발명은 항바이러스 작용, 특히 인플루엔자 바이러스의 증식 억제 활성을 갖는 화합물, 보다 바람직하게는 캡 의존적 엔도뉴클레아제 저해 활성을 나타내는 치환된 3-히드록시-4-피리돈 유도체의 프로드러그를 제공한다.		
대표청구항	식 (I):[이미지][식에서,PR은 이하의 식 a) 내지 y)에서 선택되는 기:[이미지](식에서, L은 직쇄 또는 분지상의 C1-C6 알킬렌이고,K는 수소이고,PR0은 치환기군 F로 치환되어 있을 수도 있는 C1-C6 알킬, 또는 치환기군 F로 치환되어 있을 수도 있는 C2-C6 알케닐이고,PR1은 치환기군 F로 치환되어 있을 수도 있는 탄소환식기, 치환기군 F로 치환되어 있을 수도 있는 복소환식기이고,PR2는 치환기군 F로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 F로 치환되어 있을 수도 있는 탄소환식기, 또는 치환기군 F로 치환되어 있을 수도 있는 복소환식기이고,PR3은 치환기군 F로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 F로 치환되어 있을 수도 있는 탄소환식기, 치환기군 F로 치환되어 있을 수도 있는 복소환식기이고,PR4는 치환기군 F로 치환되어 있을 수도 있는 탄소환식기, 치환기군 F로 치환되어 있을 수도 있는 복소환식기이고,PR5는 치환기군 F로 치환되어 있을 수도 있는 C1-C6 알킬이고,치환기군 F는 옥소, C1-C6 알킬, 히드록시 C1-C6 알킬, 아미노, C1-C6 알킬아미노, 탄소환 C1-C6 알킬, C1-C6 알킬카르보닐, 할로겐, 히드록시, 카르복시, C1-C6 알킬카르보닐아미노, C1-C6 알킬카르보닐옥시, C1-C6 알킬옥시카르보닐, C1-C6 알킬옥시, 시아노, 니트로임)이고;R1a는 수소, 할로겐, 히드록시, 카르복시, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알케닐, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬옥시, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬카르보닐, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬옥시카르보닐, 또는-Z-N(RA1)(RA2)(여기서, RA1 및 RA2는 각각 독립적으로 수소, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알케닐, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알키닐, 치환기군 C로 치환되어 있을 수도 있는 탄소환식기, 치환기군 C로 치환되어 있을 수도 있는 복소환식기, 치환기군 C로 치환되어 있을 수도 있는 탄소환 C1-C6 알킬, 및 치환기군 C로 치환되어 있을 수도 있는 복소환 C1-C6 알킬로 이루어지는 치환기군에서 선택되고,RA1 및 RA2는 인접하는 원자와 일체가 되어 복소환을 형성하고 있을 수도 있고,Z는 단결합, 또는 직쇄 또는 분지상의 C1-C6 알킬렌임)이고;R2a는 수소, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬이고;a) B1 및 B2는 어느 한쪽이	

	CR5aR6a이고, 다른 쪽이 NR7a이거나, 또는b) B1이 CR8aR9a이고, B2가 CR10aR11a이고,R5a는 수소이고,R9a는 수소이고, 1) B1이 CR5aR6a이고, B2가 NR7a인 경우,R3a와 R7a는 인접하는 원자와 일체가 되어 치환기군 D로 치환되어 있을 수도 있는 복소환을 형성하고 있을 수도 있고,2) B1이 NR7a이고, B2가 CR5aR6a인 경우,R3a와 R6a는 인접하는 원자와 일체가 되어 치환기군 D로 치환되어 있을 수도 있는 복소환을 형성하고 있을 수도 있고,3) B1이 CR8aR9a이고, B2가 CR10aR11a인 경우,R8a 및 R10a는 인접하는 원자와 일체가 되어 치환기군 D로 치환되어 있을 수도 있는 탄소환 또는 복소환을 형성하고 있을 수도 있거나 또는R3a 및 R11a는 인접하는 원자와 일체가 되어 치환기군 D로 치환되어 있을 수도 있는 복소환을 형성하고 있을 수도 있고,R7a는 하기 식:[이미지]으로 나타내어지는 기이고,R3a는 수소, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 탄소환식기, 치환기군 C로 치환되어 있을 수도 있는 탄소환 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 탄소환 옥시 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 복소환 C1-C6 알킬이고;R6a는 수소이고,R11a는 수소이고,여기서,B1이 CR8aR9a이고, B2가 CR10aR11a일 때,i) R8a 또는 R10a 중 어느 한쪽이수소,-Z-C(RE1)(RE2)(RE3),-Y-S-RE4,-Z-CH2-RE5, 또는이하에 나타내어지는 기:[이미지](식에서, RE1 및 RE2는 각각 독립적으로, 치환기군 C로 치환되어 있을 수도 있는 탄소환식기, 및 치환기군 C로 치환되어 있을 수도 있는 복소환식기로 이루어지는 치환기군에서 선택되고,RE3은 수소, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알케닐, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알키닐, 치환기군 C로 치환되어 있을 수도 있는 탄소환식기, 치환기군 C로 치환되어 있을 수도 있는 복소환식기, 치환기군 C로 치환되어 있을 수도 있는 탄소환 C1-C6 알킬, 및 치환기군 C로 치환되어 있을 수도 있는 복소환 C1-C6 알킬로 이루어지는 치환기군에서 선택되고,RE4는 치환기군 C로 치환되어 있을 수도 있는 탄소환 C1-C6 알킬, 및 치환기군 C로 치환되어 있을 수도 있는 복소환 C1-C6 알킬로 이루어지는 치환기군에서 선택되고,RE5는 치환기군 C로 치환되어 있을 수도 있는 방향족 복소환식기이고,RE6은 치환기군 C에서 선택되고,m은 0 또는 1 이상의 정수이되,단, m개의 RE6은 치환기군 C에서 선택되는 동일 또는 상이할 수도 있는 기이고,Y는 직쇄 또는 분지상의 C1-C6 알킬렌이고, Z는 단결합, 또는 직쇄 또는 분지상의 C1-C6 알킬렌임)이고; ii) R8a 또는 R10a 중 다른 쪽이수소, 카르복시, 시아노, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알케닐, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알키닐, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬카르보닐, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬옥시카르보닐, 치환기군 C로 치환되어 있을 수도 있는 탄소환식기, 치환기군 C로 치환되어 있을 수도 있는 탄소환 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 탄소환 옥시 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 탄소환 카르보닐, 치환기군 C로 치환되어 있을 수도 있는 탄소환 옥시카르보닐, 치환기군 C로 치환되어 있을 수도 있는 복소환식기, 치환기군 C로 치환되어 있을 수도 있는 복소환 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 복소환 옥시 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 복소환 카르보닐, 치환기군 C로 치환되어 있을 수도 있는 복소환 옥시카르보닐,-Y-S-RF1,-C(=O)-C(=O)-RF2, 또는-C(=O)-N(RF3)(RF4)(여기서, RF1, RF2, RF3 및 RF4는 각각 독립적으로, 수소, 치환기군 C로 치환되어 있을 수도 있는 C1-C6 알킬, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알케닐, 치환기군 C로 치환되어 있을 수도 있는 C2-C6 알키닐, 치환기군

	C로 치환되어 있을 수도 있는 탄소환식기, 치환기군 C로 치환되어 있을 수도 있는 복소환식기, 치환기군 C로 치환되어 있을 수도 있는 탄소환 C1-C6 알킬, 및 치환기군 C로 치환되어 있을 수도 있는 복소환 C1-C6 알킬로 이루어지는 치환기군에서 선택되고,Y는 직쇄 또는 분지상의 C1-C6 알킬렌임)이되,단, 이하의 c) 및 d)인 경우를 제외한다:c) R5a, R6a 및 R7a가 모두 수소인 경우d) R8a, R9a, R10a 및 R11a가 모두 수소인 경우;치환기군 C: 할로겐, 시아노, 히드록시, 카르복시, 포르밀, 아미노, 옥소, 니트로, C1-C6 알킬, C2-C6 알케닐, C2-C6 알키닐, 할로게노 C1-C6 알킬, C1-C6 알킬옥시, C2-C6 알키닐옥시, C1-C6 알킬티오, 히드록시 C1-C6 알킬, 탄소환식기, 복소환식기, 옥소 치환 복소환식기, 탄소환 C1-C6 알킬옥시, 탄소환 옥시 C1-C6 알킬, 탄소환 C1-C6 알킬옥시 C1-C6 알킬, 복소환 C1-C6 알킬옥시, 복소환 옥시 C1-C6 알킬, 복소환 C1-C6 알킬옥시 C1-C6 알킬, 할로게노 C1-C6 알킬옥시, C1-C6 알킬옥시 C1-C6 알킬, C1-C6 알킬옥시 C1-C6 알킬옥시, C1-C6 알킬카르보닐, C1-C6 알킬카르보닐옥시, C1-C6 알킬옥시카르보닐, C1-C6 알킬아미노, C1-C6 알킬카르보닐아미노, 할로게노 C1-C6 알킬카르보닐아미노, C1-C6 알킬아미노카르보닐, C1-C6 알킬술포닐, C1-C6 알킬술피닐 및 C1-C6 알킬술포닐아미노;치환기군 D: 치환기군 C로 치환되어 있을 수도 있는 탄소환식기, 치환기군 C로 치환되어 있을 수도 있는 복소환식기, 치환기군 C로 치환되어 있을 수도 있는 탄소환 C1-C6 알킬, 및 치환기군 C로 치환되어 있을 수도 있는 복소환 C1-C6 알킬단, R3a와 R7a가 복소환을 형성하는 경우 R3a와 R7a는 존재하지 않고, R3a와 R6a가 복소환을 형성하는 경우 R3a와 R6a는 존재하지 않고, R8a와 R10a가 복소환을 형성하는 경우 R8a와 R10a는 존재하지 않고, R3a와 R11a가 복소환을 형성하는 경우 R3a와 R11a는 존재하지 않음]로 표시되는 화합물 또는 그의 제약상 허용되는 염, 또는 그들의 용매화물.

□ US8575119

2′-chloroacetylenyl substituted nucleoside derivatives			
문헌번호 (문헌일)	US8575119 (2013-11-05)	출원번호 (출원일)	13/624093 (2012-09-21)
출원인	ENANTA PHARM (US)	기술분류	Flaviviridae/화합물
요약	The present invention relates to 2′-chloroacetylenyl-substituted nucleoside derivatives of the general formula (I): As well as pharmaceutical compositions comprising such compounds and methods to treat or prevent an HIV infection, HBV infection, HCV infection or abnormal cellular proliferation, comprising administering said compounds or compositions. In addition, the present invention includes processes for the preparation of such compounds, and the related β-D and β-L-nucleoside derivatives.		
대표청구항	1. A compound represented by Formula (I): [Image]or the β-L enantiomer thereof, or a pharmaceutically acceptable salt, ester, stereoisomer, tautomer, solvate, or combination thereof, wherein:R1 is selected from the group consisting of: 1) hydrogen;2) —N;3) halogen;4) —N3; and5) Substituted or unsubstituted —C1-C8 alkyl;R2 is selected from the group consisting of: 1) halogen;2) —CN;3) —N3; and4)		

OR6; where R6 is selected from the group consisting of: hydrogen, hydroxy protecting group, —C(O)R7, —C(O)OR7, and —C(O)NR8aR8b; wherein R7 is selected from the group consisting of: substituted or unsubstituted —C1-C8 alkyl, substituted or unsubstituted —C2-C8 alkenyl, substituted or unsubstituted —C2-C8 alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, and substituted or unsubstituted heterocyclic; R8a and R8b are each independently selected from the group consisting of: hydrogen and R7; or alternatively R8a and R8b taken together with the nitrogen atom to which they are attached form a heterocyclic ring;R4a is selected from the group consisting of: 1) halogen;2) hydrogen;3) —CN;4) —N3; and5) OR6;R3 is R6; or alternatively R2 is —OR6 and R3 and R6 together form a group selected from: —C(Me)2-, —C(CH2)4—, —CH(Ph)-, —CH(OMe)- and —P(O)(OH)—;B is selected from the group consisting of: substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, and substituted or unsubstituted heterocyclic;R5a and R5b are independently selected from the group consisting of: 1) hydrogen;2) substituted or unsubstituted —C1-C8 alkyl;3) substituted or unsubstituted —C2-C8 alkenyl;4) substituted or unsubstituted —C2-C8 alkynyl;5) or R5a and R5b are taken together with the carbon atom to which they are attached to form a group selected from —C3-C8 cycloalkyl, —C3-C8 cycloalkenyl, or —C3-C8 cycloalkynyl;R5 is selected from the group consisting of: 1) hydrogen;2) R6;3) —P(O)(OR7a)(OR7b); wherein R7a and R7b are each independently selected from the group consisting of a) hydrogen; b) unsubstituted or substituted —C1-C8 alkyl;4) —P(O)(OR7a)—O—P(O)(OR7b)(OR7c); wherein R7a and R7b are previously defined; R7c is selected from the group consisting of a) hydrogen; b) unsubstituted or substituted —C1-C8 alkyl;5) —P(O)(OR7a)—O—P(O)(OR7b)—O—P(O)(OR7c)(OR7d); wherein R7a, R7b and R7c are previously defined; R7d is selected from the group consisting of a) hydrogen; b) unsubstituted or substituted —C1-C8 alkyl;6) [Image]where X is O or S; R9 is R7 wherein R7 is previously defined; R10, R11 and R12 are each independently selected from the group consisting of: a) hydrogen; and b) unsubstituted or substituted —C1-C8 alkyl; or R11 is hydrogen, and R12 and R10 taken together with the nitrogen which R10 is attached to form a heterocyclic ring; or R11 and R12 taken together with the carbon which they are attached form a ring; R13 is hydrogen or R7, wherein R7 is previously defined; and 7) [Image]where X is O or S; n is 1-4; R8a and R8b are as previously defined; R14 is hydrogen or —(CO)—R7, wherein R7 is as previously defined; Or, R5 and R3 are taken together to form [Image]where X is O or S; and R6 is as previously defined.

□ US9546150

Substituted quinazolin-4-ones for inhibiting ubiquitin specific protease 7			
문헌번호 (문헌일)	US9546150 (2017-01-17)	출원번호 (출원일)	14/241923 (2012-08-29)
출원인	HYBRIGENICS (FR)	기술분류	Coronaviridae/화합물
요약	The present invention relates to quinazolin-4-one compounds of formula (I′), their process of preparation and uses thereof. These compounds are useful as selective and reversible inhibitors of ubiquitin specific proteases, particularly USP7, for treating e.g. cancer, neurodegenerative diseases, inflammatory disorders and viral infections.		
대표청구항	1. A compound of formula (I′): [Image]wherein R1, each identical or different, is selected from the group consisting of halogen, linear or branched (C1-C6) alkyl, OR, NRR′, CN, CF3, C(O)R, C(O)OR, C(O)NRR′, NO2, (C1-C6)alkylene-OR, (C1-C6)alkylene-NRR′, (C1-C6)alkylene-CO2R, (C1-C6)alkylene-CONRR′, —O—(C1-C6)alkylene-CO2R, —O—(C1-C6)alkylene-CONRR′, CO2—(C1-C6)alkylene-OR, CO2—(C1-C6)alkylene-NRR′, C(O)NH—(C1-C6)alkylene-OR, CONH—(C1-C6)alkylene-NRR′, and NHC(O)R;L1 is linear or branched (C1-C6)alkylene optionally substituted by one or more of ═O, CN, C(O)R, C(O)OR, or C(O)NRR′, or linear or branched CH2(C1-C6)alkylene, wherein the later (C1-C6)alkylene is optionally substituted by one or more of halogen, OR, NRR′ or CF3;q is 0, 1, 2, 3 or 4;X′ is CR7;R7 is OR, halogen, linear or branched (C1-C6)alkyl-OR, C(O)OR, C(O)NRR′, CN or OPO3H2;n is 0, 1 or 2;p is 1, 2 or 3;R3, R4, R8′ and R8, each identical or different, are selected from the group consisting of H, linear or branched (C1-C6)alkyl, halogen, OH, —O—(C1-C6)alkyl, NRR′, CN, CF3, OR, C(O)R, C(O)OR and C(O)NRR′;A is selected from the group consisting of —C(O)—, —C(O)NH—, —S(O)2— and —S(O)2NH—;L2 is linear or branched (C1-C6)alkylene optionally interrupted by at least one heteroatom selected from the group consisting of O, N and S and/or optionally substituted by: R, OR, NRR′, (C1-C6)alkyl-OR, (C1-C6)alkyl-NRR′, OC(O)R, NHC(O)R, NHC(O)NRR′, CN or C(═NH)NHOR;R6 is selected from the group consisting of H, aryl, heteroaryl, cycloalkyl and heterocyclyl, wherein the aryl, heteroaryl, cycloalkyl or heterocyclyl is monocyclic or polycyclic and is optionally substituted by one or more of linear or branched (C1-C6)alkyl, halogen, NRR′, CN, CF3, OR, ═O, C(O)R, C(O)OR, NHC(O)R, OC(O)R or C(O)NRR′; andeach R and R′, identical or different, are independently selected from the group consisting of H, linear or branched (C1-C6)alkyl, aryl, heterocyclyl, heteroaryl, linear or branched —(C1-C6)alkyl-aryl, linear or branched —(C1-C6)alkyl-heterocyclyl and linear or branched —(C1-C6)alkyl-heteroaryl;or a pharmaceutically acceptable salt, stereoisomer or tautomer thereof; with the exception of:(i) q is 0, L′ is CH2, X′ is CR7, where R7 is OH, A is —C(O)—, L2 is CH2CH2 and R6 is 3-methylpiperidin-1-yl; and(ii) q is 1, L′ is CH2, X′ is CR7, where R7 is OH, A is —C(O)—, L2 is CH(CH2CH3)2 and, at C-7, R1— is Cl.		

□ US9403863

Substituted carbonyloxymethylphosphoramidate compounds and pharmaceutical compositions for the treatment of viral infections			
문헌번호 (문헌일)	US9403863 (2016-08-02)	출원번호 (출원일)	13/610722 (2012-09-11)
출원인	IDENIX PHARMA (US)	기술분류	Flaviviridae/화합물
요약	Provided herein are compounds, compositions and methods for the treatment of liver disorders, including HCV infections. In certain embodiments, compounds and compositions of nucleoside derivatives are disclosed, which can be administered either alone or in combination with other anti-viral agents. In certain embodiments, provided herein are compounds according to Formula I: or a pharmaceutically acceptable salt, solvate, tautomeric or polymorphic form thereof.		
대표청구항	1. A compound of Formula II: [Image]or a pharmaceutically acceptable salt, tautomeric or polymorphic form thereof, wherein: Base is selected from one of formulae (i), (ii), (iv), (v), (vi), (viii), (x), and (xxvii): [Image] [Image]RL is hydrogen, alkyl, cycloalkyl, acyl, carbamyl, CO-alkyl, CO-aryl, CO-alkoxy-alkyl, CO-aryl-oxy-alkyl, CO-substituted aryl, alkyl sulfonyl, aryl sulfonyl, arylalkyl sulfonyl, or an amino acid acyl residue;RM is hydrogen, hydroxy, alkyl, cycloalkyl, acyl, carbamyl, CO-alkyl, CO-aryl, CO-alkoxy-alkyl, CO-aryl-oxy-alkyl, CO-substituted aryl, alkyl sulfonyl, aryl sulfonyl, arylalkyl sulfonyl, or an amino acid acyl residue; or, in the alternative, RL and RM together with the N atom to which they are attached form heterocyclyl;W is alkyl, cycloalkyl, alkenyl, cycloalkenyl or alkynyl;U is hydrogen, alkyl, alkenyl or alkynyl;Q is —N(Rγ)—, —O—,—S— or —C(Rγ)2—;X is O or S;Y is hydrogen or OR9;Z is hydrogen, OR10, SR10, NR5R6, F, Cl, Br, or I;each Rγ is independently hydrogen or alkyl, with the proviso that when Q is —O— or —S—, then Rγ is alkyl;R3 and R3′ are each independently hydrogen or alkyl; or R3 and R3′together with the carbon atom to which they are attached form a 3-7 membered ring;R1 and R2 are selected as follows:i) R1 and R2 are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl, cycloalkenyl, alkyl-heterocyclyl or alkyl-heteroaryl;ii) R1 and R2 together with the nitrogen atom on which they are substituted form a 3-7 membered heterocyclic or heteroaryl ring, wherein the ring is unsubstituted or substituted by C(O)Q1; oriii) R1 is hydrogen, alkyl or cycloalkyl, and R2 is -(G)mC(O)Q1;Q1 is OR4, SR4 or NR5R6;each G is independently CR7R8;m is 1 or 2;R4 is alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl or cycloalkenyl;R5 and R6 are selected as follows:i) R5 and R6 are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl or cycloalkenyl; orii) R5 and R6 together with the nitrogen atom on which they are substituted form a 3-7 membered heterocyclic or heteroaryl ring;R7 and R8 are selected as follows:i) R7 and R8 are each independently hydrogen, alkyl, heteroalkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, heteroaryl-alkyl, cycloalkyl, cycloalkenyl, alkyl-heterocyclyl or alkyl-heteroaryl; orii) R7 and R8 together with the carbon atom to which they are attached form a 3-7 membered cycloalkyl ring;R9 and R10 are selected as follows:i)		

	R9 and R10 are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl or cycloalkenyl; orii) R9 and R10 together with a C(O) and the oxygen or sulfur atoms on which they are substituted form a 5 membered ring;alkyl at each occurrence is independently C1 to C10 unsubstituted alkyl or C1 to C10 alkyl substituted with fluoro, chloro, bromo, iodo, hydroxyl, amino, alkylamino, arylamino, alkoxy, aryloxy, nitro, or cyano;alkenyl at each occurrence is independently a straight-chained or branched monovalent olefinically unsaturated hydrocarbon having up to 11 carbon atoms, and having at least 1 site of olefinic unsaturation and where alkenyl is unsubstituted;alkynyl at each occurrence is independently a straight-chained or branched acetylenically unsaturated hydrocarbon having up to 11 carbon atoms and at least 1 site of alkynyl unsaturation;cycloalkyl at each occurrence is independently a C3 to C15 saturated cyclic hydrocarbon which can be bridged or fused to form a bicyclic ring;cycloalkenyl at each occurrence is independently a C3 to C10 cyclic hydrocarbon that includes at least one double bond and which can be bridged or fused to form a multicyclic ring;acyl at each occurrence is independently —C(O)RX where RX is C1 to C10 unsubstituted alkyl, cycloalkyl, aryl, alkyl-aryl, aryl-alkyl, alkoxy-alkyl, aryl-oxy-alkyl, aryl-alkyl-sulphonyl, trityl, or monomethoxy-trityl;alkoxy at each occurrence is independently —ORY where RY is alkyl or cycloalkyl;aryl at each occurrence is independently phenyl, biphenyl, or naphthyl; or phenyl, biphenyl, or naphthyl substituted with fluoro, chloro, bromo, iodo, alkyl, hydroxyl, amino, alkylamino, arylamino, alkoxy, nitro, or cyano;heteroaryl at each occurrence is independently a C5 to C20 monovalent monocyclic aromatic or multicyclic aromatic that contains at least one aromatic ring, wherein at least one aromatic ring contains one or more O S, and N in the ring, wherein the heteroaryl is bonded to the rest of the molecule through the aromatic ring, wherein each ring can contain one or two O atoms, one or two S atoms, or one to four N atoms, or combinations thereof provided that the total number of heteroatoms in each ring is four or less and each ring contains at least one carbon atom and where the heteroaryl is unsubstituted; andheterocyclyl at each occurrence is independently a C3 to C20 monovalent monocyclic non-aromatic ring system or multicyclic ring system that contains at least one non-aromatic ring, wherein one or more of the non-arom...

□ CN102702147

Andrographolide analogue and application of andrographolide analogue to treatment			
문헌번호 (문헌일)	CN102702147 (2016-06-08)	출원번호 (출원일)	2012-10200037 (2012-06-18)
출원인	LIAONING LIFENG TECHNOLOGY DEVELOPMENT CO.,LTD. (CN)	기술분류	Togaviridae/화합물
요약	The invention discloses a novel andrographolide derivative and analogue as well as a preparation method of the novel andrographolide derivative and analogue and an application to the treatment, the prevention and the relief on human viruses and neoplastic diseases. The invention also relates to a medicine composition of the compound and an application as antivirus and anticancer disease medicine. Through chemical synthesis and preparation, semi-synthesis multi-series andrographolide analogues can be obtained and comprises the following structure general formula i.		
대표청구항	1. be selected from following andrographolidume derivative or analog: 3-(7-hydroxyl-6-(methylol)-6,9a-dimethyl-3a,4,5,5a, 6,7,8,9,9a, 9b-decahydro-1H-ring penta [a] naphthalene-2-yl) furans-2 (5H)-one, 11,12-bis-dehydrogenations-14-goesOxygen-8,17-epoxy andrographolide, 7-hydroxyl-11,12-bis-dehydrogenations-dexyandrographolide, (E)-3-(2-(3,3,6a, 10b-tetramethyl-8-methylene decahydro-1H-naphtho-[2,1-d] [1,3] dioxin-7-yl) vinyl) furans-2 (5H)-Ketone; (E)-2-(1,2-dihydroxy ethyl)-4-(6-hydroxyl-5-(methylol)-5,8a-dimethyl-2-methylene decahydronaphthalene-1-yl)But-2-ene acid hydrazide, 15,15-dihydroxymethyl-11,12-bis-dehydrogenations-dexyandrographolide, 12-nitre methyl isophthalic acid 4-deoxidationAndrographolide, 11,12-bis-dehydrogenations-14-deoxidation-(E)-15-(1,3-dihydroxypropane-2-subunit) andrographolide, (E)-4-hydroxyl-3-(2-(9-hydroxyl-3,3,6a, 10b-tetramethyl-8-methylene decahydro-1H-naphtho-[2,1-d] [1,3] dioxin-7-yl) ethylidene) dihydrofuran-2 (3H)-one, (E)-4-hydroxyl-3-(2-(3,3,6a, 10b-tetramethyl decahydro spiral shell [naphtho-Dioxin-8, [2,1-d] [1,3], 2 '-oxirane]-7-yl) ethylidene) dihydrofuran-2 (3H)-one, 11,12-bis-dehydrogenations-14-deoxidation-(E)-15-(furans-3-methylene) andrographolide, 3,19-diacetyl-11,12-bis-dehydrogenations-14-deoxidationAndrographolide, 3,19-diformyl-11,12-dehydrogenation-dexyandrographolide, 7-(4-morpholinyl)-11,12-bis-is de-Hydrogen-dexyandrographolide, 12-(4-morpholinyl)-dexyandrographolide, 3,19-diacetyl-7-Oxy-1 1,12-bis-dehydrogenations-dexyandrographolide, 3,19-diacetyl-7-hydroxyl-11, in 12-bis-dehydrogenations-14-deoxidation Herba AndrographitisEster, 7-(4-morpholinyl)-11,12-bis-dehydrogenations-14-deoxidation-8,17-epoxy andrographolide, (E)-(4-(2-(6-hydroxyl-5-(methylol)-5,8a-dimethyl-2-methylene decahydronaphthalene-1-yl) vinyl)-5-oxo-tetrahydrofuran-3-yl) phosphoric acid diformazanEster, 12-((5-amino-4H-1,2,4-triazole-3-yl) sulphur)-dexyandrographolide, 3,19-diacetyl-7-is chloro-11,12-, bis-dehydrogenations-dexyandrographolide,		

	12-((2-aminophenyl) sulphur)-dexyandrographolide, 12-((3-Chlorphenyl) amino)-dexyandrographolide, (E)-5-oxygen base-4-(2-(3,3,6a, 10b-tetramethyl-8-methylene tenHydrogen-1H-naphtho-[2,1-d] [1,3] dioxin-7-yl) ethylidene) oxolane-3-base methanesulfonates, 12-(diethoxy phosphinylidyneBase)-dexyandrographolide, 12-((4,6-dimethyl pyrimidine-2-yl) sulphur)-dexyandrographolide, 12-((2-Aminophenyl) sulphur) andrographolide, 3,14,19-tri-formoxyl-11,12-dehydrogenation-dexyandrographolide, (E)-3-(2-(4b, 10a-dimethyl-2-methylene-7-(3-nitrobenzene) ten tetrahydrochysene phenanthrene-1-yls) ethylidene)-4-hydroxyl dihydrofuran-2(3H)-one, (E)-3-(2-(6a, 10b-dimethyl-8-methylene-3-(3-nitrobenzene) decahydro-1H-naphtho-[2,1-d] [1,3]Dioxin-7-yl) ethylidene)-4-hydroxyl dihydrofuran-2 (3H)-one, 7-((2-((4H-imidazoles-2-yl) amino)-1-oxoThird-2-yl) amino)-11,12-bis-dehydrogenations-dexyandrographolide, 12-((1s, 3s, 5s)-1,3,5-tri-azepine Buddha's warrior attendantsAlkane-7-base amino)-dexyandrographolide, 7-(N-(1-morpholinyl-1-oxo third-2-yl) amino)-11,12-bis-goesHydrogen-dexyandrographolide, 11,12-bis-dehydrogenations-14-deoxidation-(E)-15-(4-guanidine radicals benzylidene)-8,17-epoxy is wornHeart lotus lactone, 3-(1-((1H-imidazoles-2-yl) amino)-2-((6aR, 9R, 10R)-9-hydroxyl-10-(methylol)-6a, 10-Dimethyl-5,5a, 6,6a, 7,8,9,10,10a, 11-decahydro benzo [g] imidazoles [2,1-b] quinazoline-6-yl) ethyl) furans-2 (5H)-one, 12-((1r, 3s, 5R, 7S)-3-hydroxyadamantane-1-yl) amino)-dexyandrographolide, 7-((2-((4H-imidazoles-2-yl) amino)-1-oxo third-2-yl) amino)-11,12-bis-dehydrogenations-14-deoxidation-8,17-epoxy Herba Andrographitis Lactone, 3,19-diacetyl-7-(4-morpholinyl)-11,12-bis-dehydrogenations-dexyandrographolide, 6-(methylol)-6,9a-dimethyl-2-(2-oxygen base-2,5-d dihydrofuran-3-yl)-2,4,5,5a, 6,7,8,9,9a, 9b-decahydro-1H-ring penta[a] naphthalene-7-base-4-morpholinyl-4-oxobutanoic acid esters, 7-(N-(1-morpholinyl-1-oxo third-2-yl) amino)-11,12-bis-Dehydrogenation-14-deoxidation-8,17-epoxy andrographolide, 11,12-bis-dehydrogenations-14-deoxidation-(Z)-15-(1-(2-aminopyrimidine-5-yl)-2-ethyoxyl-2-oxo ethylidene) andrographolide, 7-(4-morpholinyl)-12-(2-(pyridine-2-yl) amino)-Dexyandrographolide, 6-(methylol)-6,9a-dimethyl-2-(2-oxygen base-2,5-d dihydrofuran-3-yl)-2,4,5,5a, 6,7,8,9,9a, 9b-decahydro-1H-ring penta [a] naphthalene-7-base-4-(4-methylpiperazine-1-yl)-4-oxobutanoic acid esters, (E)-5-((2-aminopyrimidine-5-yl) methylene)-3-((E)-2-((6aR, 9R, 10R)-9-hydroxyl-10-(methylol)-6a, 10-Dimethyl-5,5a, 6,6a, 7,8,9,10,10a, 11-decahydro benzo [g] imidazoles [2,1-b] quinazoline-6-yl) vinyl) furanMutter-2 (5H)-one, 7-(4-morpholinyl)-11,12-bis-dehydrogenations-14-deoxidation-(E)-15-((2-aminopyrimidine-5-yl) methyleneBase) andrographolide, 11,12-bis-dehydrogenations-14-deoxidation-(Z)-15-(1-(2-aminopyrimidine-5-yl)-2-ethyoxyl-2-oxygenFor ethylidene)-8,17-epoxy andrographolide, 7-(4-morpholinyl)-12-(2-(pyridine-2-yl) amino)-14-deoxidation-8,17-epoxy andrographolide, 12-(2-(pyridine-2-yl) ami...

□ JP6000283

HIV 성숙 억제제로서의 C-3 수식 베툴린산 유도체의 C-28 아민			
문헌번호 (문헌일)	JP6000283 (2016-09-09)	출원번호 (출원일)	2013-551360 (2012-01-27)
출원인	SQUIBB BRISTOL MYERS (US)	기술분류	Retroviridae_HIV/화합물
요약	【요약】 약물 특성 및 생물학적 작용 특성을 가지는 화합물, 이들의 의약 조성물 및 사용 방법에 대해서 기재한다. 특히 특유의 항바이러스 활성을 가지는 C-3 수식 베툴린산 유도체의 C-28 아민을 HIV 성숙 억제제로서 제공한다. 이들의 화합물은 HIV 및 AIDS의 처치에 유용하다. 특히 이하의 화합물 및 의약적으로 허용되는 그 염을 본 명세서에 있어서 제공하는:식 I의 화합물, 식 II의 화합물 및 식 III의 화합물. [Image]		
대표청구항	【청구항1】식 Ⅰ : 【화1】[Image] [식 중, R1는 이소프로페닐 또는 이소프로필이며 ; X는 A로 치환된 페닐 또는 헤테로아릴 고리이며 여기서 A는—H 및 -하 로의 군에서 선택되는 적어도 하나의 요소이며; R2는 -H, -C1-6 알킬, 알킬 치환 C 1-6 알킬 , 또는 아릴 치환 C 1-6 알킬 (이어)여; Y는 -COOR2 (으)로 있어; R3는 -C1-6 알킬또는 알킬 치환 C1-6 알킬이며; R4는 H, -C1-6 알킬, -C3-6 사이클로알킬, -C1-6 치환 알킬, -C1-6 알킬-헤테로아릴, C 1-6 알킬 치환 헤테로아릴 , -C1-6 알킬-NR6R7, -C1-6 알킬-CONR8R9, -C3-6 사이클로알킬-CONR8R9, -C3-6 사이클로알킬-(CH2)1-3-NR6R7,-(CH2)1-3-C3-6 사이클로알킬-NR6R7;-(CH2)1-3-C3-6 사이클로알킬-(CH2)1-3-NR6R7;-C1-6 알킬-Q1, - C3-6 사이클로알킬-Q1, -COR10, -SO2R3 및—SO2NR2R2의 군에서 선택되어; Q1 (은)는 -하이드록시, -COOR2,-할로, 또는—SO2Ra이며; Ra (은)는 C1-6 알킬, NR2R2, 또는 식:【화2】[Image]이며; Rb (은)는 -H, -C1-6 알킬, -COR3, -SO2R3, 또는—SONR3R3이거나;혹은 R4는 또한 식:【화3】[Image]의 군에서 선택될 수 있어; R5는 -H, -C1-6 알킬, -C3-6 사이클로알킬, C 1-6 알킬 치환 알킬 , -COR10, -SO2R3 , 및—SO2NR2R2의 군에서 선택되지만;단, R4 또는 R5 중의 하나만이—COR10, -SO2R3 , 및—SO2NR2R2의 군에서 선택될 수 있거나;혹은 R4 및 R5는 인접하는 N와 하나가 되어 식 :【화4】[Image] 에서 선택된다 고리를 형성해; R10는 -H, -C1-6 알킬, -C1-6 알킬-NR6R7, -NR11R12, -OR13, -C1-6 알킬-Q2, -C3-6 사이클로알킬-Q2, - 아릴-Q2의 군에서 선택되고 여기서 n=1-6이며 여기서 Q2 (은)는 하이드록시, -COOR2,-할로, - SO2Ra, -CONHSO2R3, 또는—CONHSO2NR2R2이거나;혹은 R10는 또한 식:【화5】[Image]의 군에서 선택될 수 있어; R6 및 R7는 독립적으로 -H, -C1-6 알킬, -C1-6 치환 알킬, 아릴, 헤테로아릴, 치환 아릴, 치환 헤테로아릴 및—C1-6 알킬-Q1의 군에서 선택되거나, 혹은 R6 및 R7는 인접하는 N와 하나가 되어 식:【화6】[Image]의 군에서 선택되는 고리를 형성해; Rc (은)는 C1-6 알킬, NR2R2, 또는—COOR3이며; R8 및 R9는 독립적으로 -H, -C1-6 알킬, -C3-6 사이클로알킬, -C1-6 치환 알킬, -C1-6 알킬-헤테로아릴, C 1-6 알킬 치환 헤테로아릴 , -C1-6 알킬-NR2R2, -C1-6 알킬-CONR2R2, -C1-6 알킬-Q1 및 C3-6 사이클로알킬-Q1의 군에서 선택되거나, 혹은 R8 및 R9는 또한 독립적으로 식:【화7】[Image]의 군에서 선택될 수 있거나;혹은 R8 및 R9는 인접하는 N와 하나가 되어 식:【화8】[Image]의 군에서 선택되는 고리를 형성해; R11 및 R12는 독립적으로 -H, -C1-6 알킬, -C3-6 사이클로알킬 및 C 1-6 알킬 치환 알킬 의 군에서 선택되거나;혹은 R11 및 R12는 인접하는 N와 하나가 되어 식:【화9】[Image]의 군에서 선택되는 고리를 형성해;그리고 R13는 -H, C1-6 알킬, C 1-6 알킬 치환 알킬 및—C1-6 알킬 -	

	NR14R15의 군에서 선택되고 여기서 R14 및 R15는 독립적으로 -H, -C1-6 알킬 및 C 1-6 알킬 치환 알킬 의 군에서 선택되거나, 혹은 R14 및 R15는 인접하는 N와 하나가 되어 식:【화10】[Image]의 군에서 선택되는 고리를 형성한다] 의 화합물 및 그 의약적으로 허용되는 염.

□ US9328075

Pyrimidinone compounds and methods for treating influenza			
문헌번호 (문헌일)	US9328075 (2016-05-03)	출원번호 (출원일)	14/115560 (2012-05-05)
출원인	ST JUDE CHILDRENS RES HOSPITAL (US)	기술분류	Orthomyxoviridae/화합물
요약	In one aspect, the invention relates to novel, broad-spectrum anti-viral, pyrimidinone compounds, methods of use, compositions and kits useful in treating and/or preventing influenza. This abstract is intended as a scanning tool for purposes of searching in the particular art and is not intended to be limiting of the present invention.		
대표청구항	1. A compound of the formula: [Image]wherein R1 is an optionally substituted heteroaryl;wherein R3 is optionally substituted and selected from cycloalkyl, heterocycloalkyl, aryl, heteroaryl, —CONR4R5, and —COR6;wherein R4 and R5 are each optionally substituted and independently selected from hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, and heteroaryl; wherein at least one of R4 or R5 is not hydrogen, and provided that when R1 is a heteroaryl group having 6 or more ring members, then neither R3 nor R4 is hydrogen; or wherein —NR4R5 together form an optionally substituted ring selected from piperidinyl, morpholinyl, and piperazinyl; andwherein R6 is optionally substituted and selected from alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, phenyl, pyridazinyl, pyrimidyl, pyrazyl, triazinyl, pyrrolyl, pyrazolyl, imidazolyl, (1,2,3,)- and (1,2,4)-triazolyl, pyrazinyl, pyrimidinyl, tetrazolyl, thienyl, isoxazolyl, thiazolyl, and oxazolyl,or a pharmaceutically acceptable salt thereof.		

□ JP6108696

인돌 퀴놀린 유도체, 상기 유도체 제조 방법 및 상기 유도체를 함유하는 항말라리아제 및 항암제			
문헌번호 (문헌일)	JP6108696 (2017-03-17)	출원번호 (출원일)	2012-136013 (2012-06-15)
출원인	OKAYAMA UNIV (JP)	기술분류	anti-malaria/화합물
요약	【요약】【과제】항말라리아 활성이 높고(특히 클로로퀸 저항성 말라리아 원충에도 유효하고) 또한 안전성이 높은 항말라리아제의 유효성분이 될 수 있는 화합물 및 항종양 활성이 높고 또한 정상세포에 대한 독성이 낮은 항암제의 유효성분이 될 수 있는 화합물을 제공한다.【해결 수단】하기 식(A)으로 표시되는 것을 특징으로 하는 인돌 퀴놀린 유도체(A) 또는 그 제약학적으로 허용되는 염. [Image]【선택도】없음		
대표청구항	【請求項1】하기 정의에 따르는 식(A), 즉 식(A 112a)(으)로 표시되는 것을 특징으로 하는 인돌 퀴놀린 유도체 또는 그 제약학적으로 허용되는 염.【化1】[Image]식(A) 중, R1는 할로겐 원자, 알킬기, 하이드록시기, 알콕시기, 카르복시기, 알콕시카르보닐기 또는 니트로기이며 n는0~4의 정수이며 R2는 하기 식(R2)으로 표시되는 기이며:【化2】[Image]식(R2) 중, x는 0 이며 Z1, Z2 및 Z1와 Z2 사이의 결합과 관련된 일점쇄선은 하기[R2-I]대로이다. [R2-I]Z1 및 Z2의 일점쇄선에 의한 결합은 존재하지 않고, Z1는 수소 원자이며 Z2는 하기 식(Z2)으로 표시되는 기이다.【化3】[Image]식(Z2) 중, Z3는 탄소 원자수가1~12의 선형 또는 가지 사슬형 알킬렌기이며 Z4는 하기 식(Z4)으로 표시되는 기이다.【化4】[Image]식(Z4) 중, Z5, Z6 및 Z5와 Z6 사이의 결합과 관련된 일점쇄선은 하기 [Z4-II] 대로이다. [Z4-II]Z5 및 Z6는 일점쇄선에 의해 결합하고 있어, 이들이 결합되어 있는 질소 원자와 일체가 되고, 하기 식(Z42)으로 표시되는, Z 10를 치환기로서 가지는 5원 고리 구조 또는 6원 고리 구조 (와)과 Z 9 의 6원 고리 구조로 구성되는 축합고리 구조 (을)를 형성하는 원자군을 나타낸다.【化5】[Image] 식(Z42) 중, Z 9 (은)는 하기 식(Z92)으로 표시되는 2가의 기이며 Z 10 (은)는 치환기를 가질 수 있는 아릴기이다.【化6】[Image] 식(Z92) 중, R 92 (은)는 할로겐 원자, 알킬기, 하이드록시기, 알콕시기, 카르복시기, 알콕시카르보닐기, 또는 니트로기이며 q는0~4의 정수이다. R3는 할로겐 원자, 카르복시기, 또는 알콕시카르보닐기이며 m는0~4의 정수이며 R4, R5, 파선(i) 및 파선(ii)은 하기 [R4-I] 대로이다. [R4-I]R4는 존재하지 않고, R5는 알킬기이며 파선(i)은 이중 결합이며 파선(ii)은 단결합이다.【化7】[Image]식(A 112a) 중, R1, n , R3, m 및 R5 (은)는 각각 상기 식(A) 에 있어서의 R 1 , n, R 3 , m 및 R 5와 동의이며 Z3는 상기 식(Z2) 에 있어서의 Z 3와 동의이며 Z 9 및 Z 10는 각각 상기 식(Z 42) 에 있어서의 Z 9 및 Z 10와 동의이다.		

2-2 항체

□ US9371379

Methods for treating malaria by administering an antibody that specifically binds angiopoietin-2 (ang-2)			
문헌번호 (문헌일)	US9371379 (2016-06-21)	출원번호 (출원일)	14/134880 (2013-12-19)
출원인	REGENERON PHARMA (US)	기술분류	anti-malaria/항체
요약	The present invention provides methods for treating malaria by administering to a patient in need thereof a pharmaceutical composition comprising an antibody that specifically binds human angiopoietin-2 (Ang-2).		
대표청구항	1. A method for treating a symptom of cerebral malaria, the method comprising administering to a patient in need thereof a pharmaceutical composition comprising a therapeutically effective amount of an isolated antibody or antigen-binding fragment thereof that specifically binds human angiopoietin-2 (hAng-2) but does not substantially bind hAng-1, and a pharmaceutically acceptable carrier, wherein the antibody or antigen-binding fragment thereof comprises a heavy chain CDR-1 (HCDR1) having the amino acid sequence of SEQ ID NO:4, an HCDR-2 having the amino acid sequence of SEQ ID NO:6, an HCDR-3 having the amino acid sequence of SEQ ID NO:8, a light chain CDR-1 (LCDR-1) having the amino acid sequence of SEQ ID NO:12, an LCDR-2 having the amino acid sequence of SEQ ID NO:14, and an LCDR-3 having the amino acid sequence of SEQ ID NO:16.		

2-3 천연물

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	JP5697126	2010-037224	2010-02-23	항바이러스제	ST CHEMICAL
2	KR10-1258635	10-2010-0126564	2010-12-10	A형 인플루엔자 바이러스 H1N1 억제 활성을 갖는 Brassica juncea 종자의 아임계수 추출물을 함유한 무지방 우유	건국대학교
3	KR10-1231589	10-2010-0139894	2010-12-31	항바이러스, 항산화 및 항균 효과를 가지는 눈개승마 추출물 또는 이의 분획물	충북대학교
4	KR10-1471710	10-2012-0000819	2012-01-04	천연식물 유래 항균 또는 항바이러스 조성물 및 이를 포함하는 제품	김윤영
5	KR10-1669988	10-2013-0071543	2013-06-21	황백 추출물을 포함하는 선천면역 증강 및 항바이러스 조성물	비타바이오
6	US8962034	14/282893	2014-05-20	Antiviral therapy with a whole, leech saliva extract	BIOPEP SOLUTIONS, INC.

□ JP5697126

항바이러스제			
문헌번호 (문헌일)	JP5697126 (2015-02-20)	출원번호 (출원일)	2010-037224 (2010-02-23)
출원인	ST CHEMICAL (JP)	기술분류	Orthomyxoviridae/천연물
요약	【요약】【과제】 간벌되는 수목을 이용한, 항바이러스제, 특히 인플루엔자 바이러스에 대한 항바이러스제를 제공하는 것을 과제로 한다.【해결 수단】 소나무과 모미속에 속하는 식물의 압착액, 추출물 또는 증류물을 유효성분으로 하는 항바이러스제.【선택도】도 1		
대표청구항	【청구항1】바다사자 소나무의 증류물을 유효성분으로 하는 항바이러스제.		

□ KR10-1258635

A형 인플루엔자 바이러스 H1N1 억제 활성을 갖는 Brassica juncea 종자의 아임계수 추출물을 함유한 무지방 우유			
문헌번호 (문헌일)	KR10-1258635 (2013-04-22)	출원번호 (출원일)	10-2010-0126564 (2010-12-10)
출원인	건국대학교 (KR)	기술분류	Orthomyxoviridae/천연물
요약	본 발명은 백개자(Brassica juncea)의 종자를 110℃ 의 아임계수로 추출물을 무지방 우유에 첨가하여 A형 인플루엔자 바이러스 H1N1에 대한 저해 활성을 MTT assay를 통하여 확인하고 무지방 우유에 첨가하여 그 이화학적 특성을 검증한 결과, 110℃에서 추출한 백개자 아임계수 추출물의 최대 무독성 농도는 5 mg/mL로 나타났으며 무지방 우유에 2.5 mg/mL 농도로 첨가한 항바이러스 기능성 무지방 우유를 제공할 수 있음을 확인하였을 뿐 아니라, 상기 Brassica juncea 종자의 아임계수 추출물을 신규한 식품첨가물의 용도로서 제공하는 뛰어난 특징이 있다.		
대표청구항	백개자(Brassica juncea) 종자 분말과 규조토를 5:3 중량비로 혼합하여 110℃에서 10분간 아임계수 추출한 다음 0.45mm 필터로 여과한 것을 특징으로 하는 A형 인플루엔자 바이러스 H1N1 억제 활성용 백개자 종자의 아임계수 추출물.		

□ KR10-1231589

항바이러스, 항산화 및 항균 효과를 가지는 눈개승마 추출물 또는 이의 분획물			
문헌번호 (문헌일)	KR10-1231589 (2013-02-04)	출원번호 (출원일)	10-2010-0139894 (2010-12-31)
출원인	충북대학교 (KR)	기술분류	Orthomyxoviridae/천연물
요약	본 발명은 눈개승마 추출물 또는 이의 분획물을 포함하는 항바이러스용, 항산화용 또는 항균용 조성물 및 상기 조성물을 유효성분으로 함유하는 항바이러스, 항산화 또는 항균 활성 증가용 식품에 관한 것이다.		
대표청구항	눈개승마(Aruncus dioicus var. kamtschaticus Hara) 추출물 또는 이의 분획물을 포함하는 인플루엔자 바이러스 A(influenza virus A), PEDV(Porcine epidemic diarrhoea coronavirus), BRV(bovine rotavirus) 또는 PRV(Pseudorabies virus)에 대한 항바이러스용 조성물.		

□ KR10-1471710

천연식물 유래 항균 또는 항바이러스 조성물 및 이를 포함하는 제품			
문헌번호 (문헌일)	KR10-1471710 (2014-12-04)	출원번호 (출원일)	10-2012-0000819 (2012-01-04)
출원인	김윤영 (KR)	기술분류	Orthomyxoviridae/천연물
요약	본 발명은 고장초 및/또는 장명채, 양파 및/또는 양파피, 마늘 및/또는 마늘피, 및 임의성분인 포공영, 도라지, 산수유 열매, 뽕나무, 헛개나무 열매를 원료성분으로 하고, 이 원료성분을 80 내지 100℃의 수중에서 6 내지 48시간 동안 가열한 다음 30 내지 50℃의 온도 하에서 24 내지 96시간 동안 보존하여 얻어진 열수 추출물을 유효성분으로 포함하고, 대장균, 포도상구균, 바실러스균, 살모넬라균, 리스테리아균, 아시네토박터균, 다제내성균 등에 항균 활성, 및 인플루엔자 바이러스에 대한 항바이러스 활성을 갖는 조성물, 및 이를 포함하는 건강 식품, 미용 제품, 또는 약제를 제공하기 위한 것이다.		
대표청구항	고장초; 양파, 양파피, 또는 이의 혼합물; 및 마늘, 마늘피 또는 이의 혼합물을 포함하는 원료물질의 열수 추출물을 유효성분으로 포함하는 인플루엔자 바이러스 감염 질환 예방 또는 치료용 약학적 조성물로서, 상기 열수 추출물은: 상기 원료물질을 각각 별도로 80 내지 100℃의 수중에서 6 내지 48시간 동안 가열한 다음 혼합하여 원료 농축물을 얻거나, 또는 상기 원료물질을 모두 혼합하여 80 내지 100℃의 수중에서 6 내지 48시간 동안 가열하여 원료 농축물을 얻고; 그리고 상기 원료 농축물을 30 내지 50℃의 온도 하에서 24 내지 96시간 동안 보존하여 얻어진 것이고; 상기 원료물질의 함량은 건조 중량을 기준으로 고장초 100중량부, 양파, 양파피, 또는 이의 혼합물 50 내지 200중량부, 및 마늘, 마늘피, 또는 이의 혼합물 2 내지 30중량부를 유효성분으로 포함하는 인플루엔자 바이러스 감염 질환 예방 또는 치료용 약학적 조성물.		

□ KR10-1669988

황백 추출물을 포함하는 선천면역 증강 및 항바이러스 조성물			
문헌번호 (문헌일)	KR10-1669988 (2016-10-21)	출원번호 (출원일)	10-2013-0071543 (2013-06-21)
출원인	비타바이오 (KR)	기술분류	Orthomyxoviridae/천연물
요약	본 발명은 황백 추출물을 포함하는 선천 면역 증강 및 항바이러스용 조성물, 및 황백 추출물을, 인간을 제외한 선천 면역 증강이 필요한 동물에 투여하는 것을 포함하는 동물의 선천 면역 증강 및 항바이러스 활성 증강 방법에 관한 것이다. 본 발명에 따른 선천 면역 증강 및 항바이러스용 조성물은 항바이러스 활성 및 선천 면역 증강 효능을 나타내어, 박테리아 및 바이러스 감염성 질환의 예방 및 치료용으로 적용될 수 있고, 면역이 저하되거나 면역이 억제된 환자의 면역력 증강 및 조절을 위한 의약이나 건강기능식품, 및 동물의 항질병 강화를 목적으로 하는 선천 면역증강 및 항바이러스용 사료 등으로 광범위하게 이용될 수 있다. 또한, 본 발명에 따른 선천 면역 증강 및 항바이러스용 조성물은 독성이나 부작용을 거의 일으키지 않으므로 예방 목적으로		

	장기간 복용시에도 안심하고 사용할 수 있다.
대표청구항	황백 추출물을 포함하며, 인플루엔자 바이러스, 뉴캐슬병 바이러스, 수포성 구내염 바이러스, 콕사키바이러스 및 엔테로바이러스71형으로 이루어진 군으로부터 선택되는 1종 이상의 바이러스에 대하여 항바이러스 효과를 발휘하는 항바이러스용 약학 조성물.

□ US8962034

Antiviral therapy with a whole, leech saliva extract			
문헌번호 (문헌일)	US8962034 (2015-02-24)	출원번호 (출원일)	14/282893 (2014-05-20)
출원인	BIOPEP SOLUTIONS, INC. (CA)	기술분류	Coronaviridae/천연물
요약	Methods are provided for isolating and using a whole-saliva leech extract. The methods can include feeding a phagostimulatory agent to a leech; inducing a regurgitation in the leech, the inducing including placing the leech in an environment having a temperature of less than about 0° C.; and, collecting an unrefined, whole saliva in the regurgitation of the cooled leech. The methods can include revitalizing the leech by warming it at a temperature ranging from about 5° C. to about 40° C. Stable, lyophilized, whole-saliva extracts of a leech are also provided, the extract having a stable activity when stored for use at a temperature below about −20° C., the extract maintaining at least 70% of the activity for at least 6 months. The extracts can be used to treat solid tumors, treat liquid tumors, treat diabetes, treat a viral disease, treat a parasitic disease, treat an antibacterial disease, or serve as an anti-oxidant.		
대표청구항	1. A method of treating a viral disease, comprising contacting a virus in a fluid with a whole, leech saliva extract; the extract having a peptide molecular weight distribution with molecular weights of 3496 Daltons or greater, wherein the extract is produced from a process comprising: feeding a phagostimulatory agent to a leech;inducing a regurgitation in the leech, the inducing including placing the leech in an environment having a temperature of less than 0° C. or about 0° C.; and,collecting an unrefined, whole saliva in the regurgitation of the cooled leech.		

2-4 단백질

□ US8137672

Immunostimulatory regimen comprising administering type 1 interferon and agonistic anti-CD40 antibody			
문헌번호 (문헌일)	US8137672 (2012-03-20)	출원번호 (출원일)	13/165154 (2011-06-21)
출원인	COLORADO UNIV (US)	기술분류	Filoviridae/단백질
요약	A synergistic adjuvant is provided comprising synergistically effective amounts of at least one type 1 interferon and at least one CD40 agonist, wherein these moieties may be in the same or separate compositions. In addition, fusion proteins and DNA conjugates which contain a type 1 interferon/CD40 agonist/antigen combination are provided. The use of these compositions, protein and DNA conjugates as immune adjuvants for treatment of various chronic diseases such as HIV infection and for enhancing the efficacy of vaccines (prophylactic and therapeutic) is also provided.		
대표청구항	1. An immunostimulatory regimen for inducing CD70 expression on dendritic cells and inducing the expansion of CD8+T cells in a subject in need thereof and thereby eliciting an anti-viral immune response comprising administering type I interferon and an immune agonist polypeptide other than said type 1 interferon, and further including the administration of a viral antigen, wherein said regimen does not include the administration of a TLR agonist and further requires that the only immune agonist polypeptide other than said type 1 interferon administered in said immunostimulatory regimen consists of an agonistic CD40L polypeptide or a CD40 agonistic antibody or a CD40 agonistic antibody fragment polypeptide, and further wherein said agonistic CD40L polypeptide, CD40 agonistic antibody or CD40 agonistic antibody fragment and said type 1 interferons are administered in amounts that in combination, but not separately, result in the induction of CD70 expression on dendritic cells.		

2-5 펩타이드

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	US9433671	13/827469	2013-03-14	Anti-malaria compositions and methods	ARTIFICIAL CELL TECHNOLOGIES, INC.
2	US10464975	15/201235	2016-07-01	Stabilized anti-microbial peptides	DANA-FARBER CANCER INST

□ US9433671

Anti-malaria compositions and methods			
문헌번호 (문헌일)	US9433671 (2016-09-06)	출원번호 (출원일)	13/827469 (2013-03-14)
출원인	ARTIFICIAL CELL TECHNOLOGIES, INC. (US)	기술분류	anti-malaria/펩타이드
요약	Multilayer films comprise polypeptide epitopes from Plasmodium falciparum, specifically a circumsporozoite T1, B or T* epitope. The multilayer films are capable of eliciting an immune response in a host upon administration to the host. The multilayer films can include at least one designed peptide that includes one or more polypeptide epitopes from a Plasmodium protozoan.		
대표청구항	1. A composition comprising a first multilayer film comprising a plurality of oppositely charged polyelectrolyte layers, wherein one of the polyelectrolyte layers in the multilayer film comprises a first antigenic polypeptide polyelectrolyte, wherein the first antigenic polypeptide comprises a Plasmodium falciparum circumsporozoite T1BT* epitope covalently linked to one or two surface adsorption regions at the C-terminus and/or the N-terminus of the polypeptide, wherein at least one of the surface adsorption regions comprises eight negatively or positively charged amino acid residues,wherein the polyelectrolytes in the multilayer film comprise a polycationic material or a polyanionic material having a molecular weight of greater than 1,000 and at least 5 charges per molecule,wherein the first multilayer film is deposited on a core nanoparticle or microparticle, or is in the form of a nanocapsule or microcapsule prepared by dissolving the core particle,wherein the first multilayer film retains more than half of its polyelectrolytes when incubated in phosphate buffered saline at 37° C. for 24 hours.		

□ US10464975

Stabilized anti-microbial peptides			
문헌번호 (문헌일)	US10464975 (2019-11-05)	출원번호 (출원일)	15/201235 (2016-07-01)
출원인	DANA-FARBER CANCER INST (US)	기술분류	Retroviridae_HIV/펩타이드
요약	The present invention provides methods of designing and making structurally stabilized anti-microbial peptides for the prophylaxis and treatment of infection. Methods are also disclosed for designing stabilized anti-microbial peptides that are selectively lytic/cytotoxic to bacteria, allowing for internal use of anti-microbial peptides without mammalian membrane disruption and cytotoxicity.		
대표청구항	1. A therapeutic compound comprising a cross-linked amino acid sequence having the formula: [Image]or a pharmaceutically acceptable salt thereof,wherein:each R1 and R2 is independently H, alkyl, alkenyl, alkynyl, arylalkyl, cycloalkylalkyl, heteroarylalkyl, or heterocyclylalkyl, any of which is substituted or unsubstituted;each R3 is independently alkylene, alkenylene, or alkynylene, any of which is substituted or unsubstituted;each x is 3 or 6;each w and y is independently 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20;z is 1, 2, 3, or 4; andeach Xaa is independently an amino acid,wherein the cross-linked amino acid sequence has 3, 4, 5, 6, 7, 8 or 9 amino acid substitutions relative to the sequence set forth in SEQ ID NO:3;wherein the substitutions are: (a) two or more amino acid substitutions with stapling amino acids that are internally cross-linked; and(b) one or more of: (i) a substitution with a basic amino acid; (ii) a substitution with a histidine; (iii) a substitution with a D-alanine; (iv) a substitution with an alanine; and (v) a substitution of a methionine with a norleucine;wherein at least one of the substitutions of (b) is selected from the group consisting of: (i) a substitution with a lysine at position 9 of SEQ ID NO:3; (ii) a substitution with a histidine, and (iii) a substitution with a glutamic acid;wherein the cross-linked amino acid sequence has an alpha helical conformation; and wherein the compound exhibits an increased antibacterial effect against at least one bacterium relative to an un-cross-linked corresponding sequence set forth in SEQ ID NO:3.		

2-6 핵산

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	KR10-1261589	10-2010-0032936	2010-04-09	RIG-I 단백질을 표적으로 하는 RNA 앱타머 및 그의 용도	ARTIFICIAL CELL TECHNOLOGIES, INC.
2	US9605266	14/801710	2015-07-16	Cell-specific internalizing RNA aptamers against human CCR5 and uses therefore	DANA-FARBER CANCER INST

□ KR10-1261589

RIG-I 단백질을 표적으로 하는 RNA 앱타머 및 그의 용도			
문헌번호 (문헌일)	KR10-1261589 (2013-04-30)	출원번호 (출원일)	10-2010-0032936 (2010-04-09)
출원인	포항공과대학교 (KR)	기술분류	Filoviridae/핵산
요약	RIG-I 단백질에 특이적인 RNA 앱타머, 및 이를 유효성분으로 포함하는 면역 조절제, 유전자 발현 조절제, 및 항바이러스제가 제공된다.		
대표청구항	서열번호 61의 염기서열로 이루어지는, RIG-I(Retinoic-acid inducible gene-I) 단백질에 특이적으로 결합하는 RNA 앱타머.		

□ US9605266

Cell-specific internalizing RNA aptamers against human CCR5 and uses therefore			
문헌번호 (문헌일)	US9605266 (2017-03-28)	출원번호 (출원일)	14/801710 (2015-07-16)
출원인	CITY OF HOPE (US)	기술분류	neutralize virus/핵산
요약	Provided herein are fluoropyrimidine-modified RNA aptamers capable of binding CCR5. The compositions and methods provided herein are, inter alia, useful for the delivery of anti-viral drugs (e.g., siRNAs) and preventing HIV entry into a target cell.		
대표청구항	1. A chimeric construct comprising an aptamer and antiviral siRNA, optionally linked by a suitable linker, wherein said aptamer has at least 80% sequence identity with G-3(SEQ ID NO: 15)-GGG AGG ACG AUG CGG GCC UUC GUU UGU UUC GUC CACAGA CGA CUC GCC CGA-3'.		

3. 코로나19 기전 기반 치료제

3-1 화합물

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	JP6044923	2012-106382	2012-05-08	신규 PI폴리아미드	NIHON UNIV
2	US8501699	13/607472	2012-09-07	Bicyclic nucleosides and nucleotides as therapeutic agents	BIOTA SCIENT MANAGEMENT
3	CN103980318	2014-10168286	2014-04-24	Nucleoside phosphate prodrug containing substituted benzyl, preparation method and application thereof	LIU PEI

□ JP6044923

신규 PI폴리아미드			
문헌번호 (문헌일)	JP6044923 (2016-11-25)	출원번호 (출원일)	2012-106382 (2012-05-08)
출원인	NIHON UNIV (JP)	기술분류	TMPRSS2(막횡단 단백질분해효소)/화합물
요약	【요약】 (수정유) 【과제】전립선암의 예방, 치료에 유용한 화합물 및 상기 화합물을 함유하는 약제의 제공. 【해결 수단】안드로겐 응답 유전자인 TMPRSS2 유전자와 전사 제어인자인 ETS family에 속하는 ERG 유전자와의 융합을 억제하는, 하기 식을 대표예로 하는 신규한 피롤-이미다졸 함유 폴리아미드 및 상기 화합물을 함유하는 약제. [Image]【선택도】없음		
대표청구항	【청구항1】다음식1~4중 어느 하나에 나타나 피 롤-이미다졸 폴리아미드. [식 1][Image][식 2][Image][식 3][Image][식 4][Image]		

□ US8501699

Bicyclic nucleosides and nucleotides as therapeutic agents			
문헌번호 (문헌일)	US8501699 (2013-08-06)	출원번호 (출원일)	13/607472 (2012-09-07)
출원인	BIOTA SCIENT MANAGEMENT (AU)	기술분류	핵산 작용제 및 역전사효소 억제제(Reverse Transcriptase Inhibitor)/화합물
요약	The present disclosure relates to the use and methods of manufacture of bicyclic nucleosides and nucleotides for the treatment and prevention of infectious and proliferative diseases, including microbial infections and cancer.		

대표청구항	1. A compound of formula I for use in treating or preventing a hepatitis C viral infection in a subject suffering from or at risk of a hepatitis C viral infection comprising in vivo production of a therapeutically effective metabolite of the compound of formula I, wherein the metabolite has an intracellular half-life of greater than about 10 hours, and wherein formula I comprises: [Image]wherein the [Image] defines the active pharmaceutical ingredient as a D- or L-nucleoside or nucleotide;A is selected from the group consisting of —O—, —S—, —CH2—, —CHF—, —CF2—, and —NR—;R1′, R2, R2′, R3, R3′, and R4′ are independently selected from the group consisting of —H, halogen, —OH, —NHOH, —NHNH2, —N3, —CN, —OCOCHNC(CH3)2, —COOH, —CONH2, —C(S)NH2, —COOR, —R, —OR, —SR, —SSR, —NHR, and —NR2, or R2 and R2′ together or R3 and R3′ together represents ═O, ═S, or ═L′-Y′, where L′ is selected from the group consisting of N, CH, CF, CCl, and CBr and Y′ is selected from the group consisting of H, halogen, N3, methyl, ethyl, and CN;R is independently halogen, —H, —OH, —SH, —CN, S(C1-C4alkyl), —NO2, NH2, —NHNH2, —N3, —NR′R′ wherein each R′ is independently H or C1-C4 alkyl, —C(S)NH2, —CH3, —CH2OH, —CH2NH2, —CH2NH3+, —COOH, —COOCH3, —COOCH2CH3, —CONHCH3, —CONH2, —CF3, —N(CH3)2, —NHCOCH3, —NHCONH2, —NHCNHNH2, —ONH2, —CH2OCH3, —O(CH2)CH3, COOC1-C4alkyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted aryl, optionally substituted acyl, optionally substituted arylalkyl, optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted phenyl, optionally substituted heteroaryl, optionally substituted heterocyclyl, optionally substituted alkyloxy, optionally substituted alkenyloxy, optionally substituted alkynoxy, optionally substituted aryloxy, optionally substituted acyloxy, optionally substituted oxyacyl, optionally substituted arylalkoxy, optionally substituted heterocycloxy, optionally substituted heteroaryloxy, optionally substituted cycloalkoxy, optionally substituted cycloalkenoxy, optionally substituted amino, optionally substituted aminoacyl, optionally substituted aminoacyloxy, optionally substituted acylamino, optionally substituted oxyacylamino, optionally substituted oxyacyloxy, optionally substituted acylimino, optionally substituted acyliminoxy, optionally substituted oxyacylimino, optionally substituted aminothioacyl, optionally substituted thioacylamino, optionally substituted aminosulfinyl, optionally substituted aminosulfonyl, optionally substituted thio, optionally substituted thioalkyl, optionally substituted thioacyl, optionally substituted thioacyloxy, optionally substituted oxythioacyl, optionally substituted oxythioacyloxy, optionally substituted phosphorylamino, optionally substituted sulfinyl, optionally substituted sulfonyl, optionally substituted sulfinylamino, optionally substituted sulfonylamino, optionally substituted oxysulfinylamino, and optionally substituted oxysulfonylamino;L is selected from the group consisting —O, —S, —NH, —NR, —CY3, —CY2O, —CY2S, —CY2NH, —CY2, —CY2CY2, —CY2OCY2, —CY2SCY2, and —CY2NHCY2;Y is independently selected from the group consisting of —H, halogen, —R, —OR, and —NR2;R5 is selected from the group consisting of —OH, —R, —OR, —NR2, or a mono-phosphate, di-phosphate, or tri-phosphate moiety or mimic thereof;Base is a group of formula II: [Image]wherein the [Image] is a single or double bond;Z1, Z3, and Z4 are independently selected from the group consisting of >C—CONHR, >C—CONR2, >C—C(S)NH2, >C—COOR, >C—R, >C—OR, >C—SR, >C—NHR, >C—NR2, >C-optionally substituted heteroaryl, >C-optionally substituted alkyl, and >C-G;Z2 is selected from the

	group consisting of >C—NH2 and >C═O;G is independently selected from the group consisting of —H, —F, —Cl, —I, —NH2, —NHCH3, —CN, —COOH, —CSNH2, —C≡CH, —C≡CCH3, —C≡CCH2OH, —C≡C—Si(CH3)3, —CONH2, —CONHCH3, —CONH-phenyl, —CONH-methylphenyl, thiazole, oxazole, imidazole, imidazoline, triazole, and tetrazole, and when the compound comprises two or more G groups, the G's are identical or different; andwhen A is O; R1′, R3, R4′, and R5 are H; L is O; and R2′ and R3′ are OH; then R2 is halogen, OH, NHOH, NHNH2, N3, CN, OCOCHNC(CH3)2, COOH, CONH2, C(S)NH2, COOR, R6, OR, SR, SSR, NHR, or NR2, and R6 is halogen, OH, SH, CN, S(C1-4 alkyl), NO2, NH2, NHNH2, N3, NR′R′ wherein each R′ is independently H or C1-4 alkyl, C(S)NH2, CH3, CH2OH, CH2NH2, CH2NH3+, COOH, COOCH3, COOCH2CH3, CONHCH3, CONH2, CF3, N(CH3)2, NHCOCH3, NHCONH2, NHCNHNH2, ONH2, CH2OCH3, O(CH2)CH3, COO(C1-4 alkyl), substituted alkyl, substituted alkenyl, substituted alkynyl, substituted aryl, substituted acyl, substituted arylalkyl, substituted cycloalkyl, substituted cycloalkenyl, substituted phenyl, substituted heteroaryl, substituted heterocyclyl, substituted alkyloxy, substituted alkenyloxy, substituted alkynoxy, substituted aryloxy, substituted acyloxy, substituted oxyacyl, substituted arylal...

□ CN103980318

Nucleoside phosphate prodrug containing substituted benzyl, preparation method and application thereof			
문헌번호 (문헌일)	CN103980318 (2017-08-25)	출원번호 (출원일)	2014-10168286 (2014-04-24)
출원인	LIU PEI (CN)	기술분류	핵산 작용제 및 역전사효소 억제제(Reverse Transcriptase Inhibitor)/화합물
요약	The invention relates to a novel nucleoside phosphate prodrug containing substituted benzyl, a preparation method and an application. The novel nucleoside phosphate prodrug containing substituted benzyl is a compound or its isomer or medicinal salt shown in a formula (I) or a formula (II), can be used as prodrugs for various nucleoside analogues including non-cyclic nucleoside, carbon-cyclic nucleoside, furan-cyclic nucleoside, so that biological activity of the nucleoside compound can be reinforced, and the nucleoside phosphate prodrug can be used for treating virus infection and cancer.		
대표청구항	1. compound or its isomers or officinal salt shown in a kind of formula (IV) : Wherein, R1Selected from halogen, C1-C8Straight or branched alkyl, C1-C8Alkoxy, C2-C8Straight or branched alkenyl and C2-C8Straight or branched alkynyl ; R2And R3It is each independently selected from phenyl ring, benzyl, C1-C12Straight or branched alkyl, C3-C6Saturation or unsaturated cycloalkanes Base, C2-C8Straight or branched alkenyl, C2-C8Straight or branched alkynyl ; Wherein, the compound or its isomers shown in formula (IV) do not include following compound : Wherein, the isomers includes dynamic isomer, cis-trans-isomer, rotamer and optical isomer.		

3-2 천연물

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	KR10-1150425	10-2011-0096701	2011-09-26	미더덕 유래의 혈압조절용 조성물	제주대학교
2	KR10-1222845	10-2012-0024212	2012-03-09	홍삼 추출물의 감식초 반응 혼합물을 함유한 혈관 질환의 예방 또는 치료용 조성물	천지양
3	KR10-1614431	10-2014-0144574	2014-10-23	남성 성기능 개선 및 불임 치료용 약학적 조성물	케미메디

□ KR10-1150425

미더덕 유래의 혈압조절용 조성물

문헌번호 (문헌일)	KR10-1150425 (2012-05-21)	출원번호 (출원일)	10-2011-0096701 (2011-09-26)
출원인	제주대학교 (KR)	기술분류	ACE2/천연물
요약	본 발명은 양식 미더덕 유래 혈압 조절 효과를 가지는 조성물에 관한 것으로서, 양식 미더덕으로부터 혈압조절에 관여하고 있는 인자 중의 하나인 안지오텐신 I-전환효소(Angiotensin I-converting enzyme) 활성을 저해하고, 산화질소(Nitric oxide) 생성에 의한 혈관확장을 유도하는 혈압 조절 효과를 가지는 펩타이드를 분리하고 이를 유효성분으로 함유하는 혈압조절 조성물을 개시한다.		
대표청구항	미더덕(Styela clava)의 육 및 껍질 부위 중 선택되는 단독 또는 혼합물의 단백질 가수분해물을 유효성분으로 함유하는 혈압조절용 조성물로, 상기 단백질 가수분해물은 프로타맥스를 단백질 가수분해 효소로 하여 얻어진 것인 혈압조절용 조성물.		

□ KR10-1222845

홍삼 추출물의 감식초 반응 혼합물을 함유한 혈관 질환의 예방 또는 치료용 조성물

문헌번호 (문헌일)	KR10-1222845 (2013-01-10)	출원번호 (출원일)	10-2012-0024212 (2012-03-09)
출원인	천지양 (KR)	기술분류	ACE2/천연물
요약	본 발명은 진세노사이드 Rg3와 아르기닌 유도체가 증강된 홍삼 추출물의 감식초 반응 혼합물을 함유한 혈관 질환의 예방 또는 치료용 조성물에 관한 것으로서, 상기 홍삼 추출물의 감식초 반응 혼합물을 함유한 조성물은, NO 생성 증가 효과, 안지오텐신 전환 효소 억제 효과 등이 우수하여 동맥경화증, 고혈압, 협심증, 심근경색, 허혈성 심장질환, 심부전, 경혈관 동맥 성형술 후 발생하는 합병증, 뇌경색, 뇌출혈, 및, 뇌졸중 등을 비롯한 혈관 질환을 효과적으로 예방 또는 억제할 수 있는 조성물로 유용하게 사용될 수 있다.		

대표청구항	홍삼의 탄소수 1 내지 4개의 알코올 또는 이의 알코올 수용액 추출물을 농축하여 제조한 홍삼 추출물에 홍삼 추출물 중량의 5~20배의 pH 3.0~3.5인 감식초를 가하고 70~90℃에서 1~24시간 동안 반응하여 제조한 홍삼 추출물의 감식초 반응 혼합물을 함유하는 것을 특징으로 하는 고혈압, 협심증 또는 심근경색의 예방 또는 치료용 조성물.

□ KR10-1614431

남성 성기능 개선 및 불임 치료용 약학적 조성물			
문헌번호 (문헌일)	KR10-1614431 (2016-04-15)	출원번호 (출원일)	10-2014-0144574 (2014-10-23)
출원인	케미메디 (KR)	기술분류	ACE2/천연물
요약	본 발명은 남성 성기능 개선 및 불임 치료용 약학적 조성물에 관한 것으로서, 보다 상세하게는 산수유 추출물, 구기자 추출물, 복분자 추출물, 토사자 추출물, 오미자 추출물 및 차전자 추출물로부터 선택된 1종 이상의 추출물을 유효성분으로 포함하는 남성 성기능 개선 및 불임 치료용 약학적 조성물, 그리고 남성 성기능 개선 및 불임 예방용 식품 조성물에 관한 것이다. 상기 조성물은 HUVEC에서 NO 농도, ACE (Angiotensin converting enzyme) 저해 효과, PDE (Phosphodiesterase)-5 저해 효과, CREM 발현 등과 정자 수, 정자의 활동성의 증강, 테스토스테론 함량 증가 등을 통해 남성 성기능 개선 또는 불임에 효과가 있다.		
대표청구항	구기자 추출물을 유효성분으로 포함하되, 상기 추출물은 구기자 중량대비 4 내지 8배의 30% 에탄올에 넣고 60 내지 70℃에서 3 내지 5시간 동안 환류 추출하고, 추출물을 여과한 후 여액을 50 내지 60℃ 이하에서 감압 농축한 후, 500 ppm으로 농도를 조절한 것을 특징으로 하는 남성 불임 치료용 약학적 조성물.		

3-3 펩타이드

□ CN102475884

Application of four polypeptides in preparation ACE inhibitor and antihypertensive drug			
문헌번호 (문헌일)	CN102475884 (2013-08-14)	출원번호 (출원일)	2010-10563755 (2010-11-29)
출원인	DALIAN INST OF CHEM PHY, CHINESE ACAD OF SCI (CN)	기술분류	ACE2/펩타이드
요약	The invention relates to four polypeptide compounds, namely ATVLNYLP, ACEPGVDYVY, VTSIDWVR and SSEANLYR, which can inhibit angiotensin-converting enzyme (ACE) activity and lower blood pressure. Amino acid sequences of the four polypeptide compounds are respectively Ala-Thr-Val-Leu-Asn-Tyr-Leu-Pro, Ala-Cys-Glu-Pro-Gly-Val-Asp-Tyr-Val-Tyr, Val-Thr-Ser-Ile-Asp-Trp-Val-Arg and Ser-Ser-Glu-Ala-Asn-Leu-Tyr-Arg. The polypeptides ATVLNYLP, ACEPGVDYVY, VTSIDWVR and SSEANLYR have an ACE inhibitory activity and an antihypertensive activity, and have a good application prospect as a health product for treating hypertension, heart disease and cardiovascular disease and as a lead compound.		
대표청구항	1. the application of polypeptide in the preparation ACE inhibitor, it is characterized in that: described polypeptide is ATVLNYLP.		

4. 증상 및 타겟 기반 치료제

4-1 화합물

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	US8357388	12/716383	2010-03-03	Drug depot implant designs and methods of implantation	WARSAW ORTHOPAEDIC
2	US8106069	12/766230	2010-04-23	Pyrrolo[2,3-b]pyridine derivatives active as kinase inhibitors and pharmaceutical compositions comprising them	PFIZER
3	KR10-1213948	10-2010-0047385	2010-05-20	잔가시모자반으로부터 분리한 활성물질을 이용한 항염증성 조성물	제주테크노파크
4	KR10-1105344	10-2010-0048283	2010-05-24	신규 진세노사이드 및 이의 용도	제주대학교
5	US8846673	13/388700	2010-08-11	Azaindazoles as kinase inhibitors and use thereof	BRISTOL MYERS SQUIBB
6	KR10-1237573	10-2011-0003063	2011-01-12	진세노사이드의 면역성 질환의 예방 및 치료 용도	충남대학교
7	KR10-1537148	10-2012-7031149	2011-05-30	푸리논 유도체	ONO PHARMA
8	JP5917544	2013-540045	2011-11-18	JAK 억제제로서의 헤테로고리 치환 피롤로피리딘 및 피롤로피리미딘	INCYTE
9	US8404641	13/333573	2011-12-21	Macrocyclic lactone compounds and methods for their use	ELIXIR MEDICAL
10	KR10-1404257	10-2012-0043174	2012-04-25	옥타플로레톨 에이 화합물을 유효성분으로 포함하는 염증질환 또는 면역질환의 예방 및 치료용 조성물	제주대학교
11	KR10-1413207	10-2012-0063767	2012-06-14	염증성 질환의 예방 또는 치료용 약학 조성물 및 건강기능식품	부산대학교
12	KR10-1936851	10-2012-0077013	2012-07-16	단백질 키나아제 저해제인 신규 피라졸로피리딘 유도체 또는 인다졸 유도체	한국과학기술연구원
13	KR10-1417341	10-2012-0102646	2012-09-17	아포-9''-푸코잔티논 화합물을 유효성분으로 포함하는 염증질환 또는 면역질환의 예방 및 치료용 조성물	제주대학교

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
14	KR10-1460237	10-2012-0103785	2012-09-19	히스피딘을 유효성분으로 포함하는 염증성 장질환 예방 또는 치료용 약학조성물	건국대학교
15	US8741905	13/887466	2013-05-06	Compounds and methods for treating autoimmune diseases	THE BROAD INSTITUTE
16	KR10-1501375	10-2013-0111679	2013-09-17	메트포민을 유효성분으로 함유하는 염증성 장질환의 예방 또는 치료용 조성물	가톨릭대학교
17	US8987298	14/178749	2014-02-12	Indazole inhibitors of the Wnt signal pathway and therapeutic uses thereof	SAMUMED
18	US8962635	14/341421	2014-07-25	Tyrosine kinase inhibitors	PRINCIPIA BIOPHARMA
19	US9527847	14/448998	2014-07-31	Treatment of lupus, fibrotic conditions, and inflammatory myopathies and other disorders using PI3 kinase inhibitors	INFINITY PHARMACEUTICALS
20	US9738660	14/599349	2015-01-16	Selective inhibitors for protein kinases and pharmaceutical composition and use thereof	NATIONAL CHIAO TUNG UNV
21	CN105367555	2015-10475504	2015-08-06	Substituted heteroaryl compound and composition and application thereof	DONGYANGGUANG PHARMACEUTICAL
22	US9669028	14/871278	2015-09-30	Substituted 5-(pyrazin-2-yl)-1H-pyrazolo [3, 4-B] pyridine and pyrazolo [3, 4-B] pyridine derivatives as protein kinase inhibitors	ARRIEN PHARMACEUTICALS
23	US9840537	15/295482	2016-10-17	Selective delivery molecules and methods of use	AVELAS BIOSCIENCES
24	US10071086	15/420398	2017-01-31	1H-pyrazolo[3,4-b]pyridines and therapeutic uses thereof	SAMUMED

□ US8357388

Drug depot implant designs and methods of implantation			
문헌번호 (문헌일)	US8357388 (2013-01-22)	출원번호 (출원일)	12/716383 (2010-03-03)
출원인	WARSAW ORTHOPAEDIC (US)	기술분류	대식세포/화합물
요약	The present invention relates to novel drug depot implant designs for optimal delivery of therapeutic agents to subjects. The invention provides a method for alleviating pain associated with neuromuscular or skeletal injury or inflammation by targeted delivery of one or more therapeutic agents to inhibit the inflammatory response which ultimately causes acute or chronic pain. Controlled and directed delivery can be provided by drug depot implants, comprising therapeutic agents, specifically designed to deliver the therapeutic agent to the desired location by facilitating their implantation, minimizing their migration from the desired tissue location, and without disrupting normal joint and soft tissue movement.		
대표청구항	1. A drug depot implant comprising: a body having a surface and opposites sides;an anchoring system extending from the body, the anchoring system comprising at least two angled flexible barbs, each of the at least two angled flexible barbs comprising a point adapted to allow forward translational movement of the body and limit backward translational movement of the body from a targeted tissue, wherein the at least two angled flexible barbs are on the surface of the body and the at least two angled flexible barbs are located on opposite sides of the body; anda therapeutic agent disposed throughout the body and the anchoring system, wherein the body and the anchoring system are capable of eluting the therapeutic agent and the drug depot implant is solid and provides an optimal concentration of the therapeutic agent from 1 cm to 5 cm from the drug depot implant.		

□ US8106069

Pyrrolo[2,3-b]pyridine derivatives active as kinase inhibitors and pharmaceutical compositions comprising them			
문헌번호 (문헌일)	US8106069 (2012-01-31)	출원번호 (출원일)	12/766230 (2010-04-23)
출원인	PFIZER (US)	기술분류	야누스 키나아제/화합물
요약	Compounds which are pyrrolo[2,3-b]pyridine derivatives or pharmaceutically acceptable salts thereof, their preparation process and pharmaceutical compositions comprising them are disclosed; these compounds are useful in the treatment of diseases caused by and/or associated with an altered protein kinase activity such as cancer, cell proliferative disorders, Alzheimer's disease, viral infections, auto-immune diseases and neurodegenerative disorders; also disclosed is a process under SPS		

	conditions for preparing the compounds of the invention and chemical libraries comprising a plurality of them.
대표청구항	1. A method for inhibiting protein kinase activity of a kinase selected from the group consisting of cdk2/cyclin A, E, B1, D1, MAPK, EGFR, PKA, Cdk5/p25, IGF1-R, Aurora-2 or Cdc7/dbf4, ACK1, BRK, JAK2, MELK MPS1, NEK6, PDGFR, PDK1, PLK1, RET, ABL, AKT1, AKT2, AKT3, AUR2, IGFR1, IR, LCK, and combinations thereof, which comprises administering to a mammal in need thereof an effective amount of a compound of formula (I) [Image]wherein R is selected from the group consisting of —Ra, —CORa, —CONRaRb, —SO2Ra or —COORa;R1 is a group —NRcRd or —ORc;wherein Ra, Rb, Rc and Rd, are the same or different, and are each independently hydrogen or a group optionally further substituted, selected from straight or branched C1-C6 alkyl, C2-C6 straight or branched alkenyl, straight or branched C2-C6 alkynyl, C3-C6 cycloalkyl or cycloalkyl C1-C6 alkyl, aryl or aryl C1-C6 alkyl, or heterocycle or heterocycle C1-C6 alkyl or, taken together with the nitrogen atom to which they are bonded, either Ra and Rb as well as Rc and Rd can form an optionally substituted 4 to 7 membered heterocycle, optionally containing one additional ring heteroatom or heteroatomic group selected from S, O, N or NH;or isomers, tautomers or a pharmaceutically acceptable salt thereof.

□ KR10-1213948

잔가시모자반으로부터 분리한 활성물질을 이용한 항염증성 조성물			
문헌번호 (문헌일)	KR10-1213948 (2012-12-12)	출원번호 (출원일)	10-2010-0047385 (2010-05-20)
출원인	제주테크노파크 (KR)	기술분류	인터루킨/화합물
요약	본 발명은 잔가시모자반으로부터 분리한 활성물질을 이용한 항염증성 조성물을 개시한다. 상기 잔가시모자반으로부터 분리한 활성물질은 사가퀴노산, 사가크로멘올 및 이소케토차브롤산이며, 이들 물질은 NO 생성 억제 활성, PGE2 생성 억제 활성, 염증성 사이토카인(TNF-α, IL-1β 및 IL-6)의 생성 억제 활성, iNOX 생성 억제 활성 및/또는 COX-2 생성 억제 활성을 갖는다.		
대표청구항	이소케토차브롤산을 유효성분으로 포함하는 항염증성 조성물.		

□ KR10-1105344

신규 진세노사이드 및 이의 용도			
문헌번호 (문헌일)	KR10-1105344 (2012-01-05)	출원번호 (출원일)	10-2010-0048283 (2010-05-24)
출원인	제주대학교 (KR)	기술분류	인터루킨/화합물

요약	본 발명은 화학식 1의 구조를 갖는 진세노사이드를 유효성분으로 포함하는 의약, 식품 또는 화장료 조성물에 관한 것이다. 본 발명에 따른 화학식 1의 구조를 갖는 진세노사이드는 인터루킨-12 (Interleukin-12), 인터루킨-6 (Interleukin-6) 및 TNF(Tumor necrosis factor)-α 생산 저해 효과가 우수하여, 이들로 인해 유발되는 자가 면역 질환과 패혈증 등의 치료에 유용하게 활용될 수 있다.
대표청구항	하기 화학식 Ⅰ의 구조를 갖는 진세노사이드(ginsenoside).[화학식 1][이미지]

□ US8846673

Azaindazoles as kinase inhibitors and use thereof			
문헌번호 (문헌일)	US8846673 (2014-09-30)	출원번호 (출원일)	13/388700 (2010-08-11)
출원인	BRISTOL MYERS SQUIBB (US)	기술분류	BTK/화합물
요약	Compounds having the formula (I), and enantiomers, and diastereomers, pharmaceutically-acceptable salts, thereof, (I) are useful as kinase modulators, including Btk modulation, wherein A1, A2, A3, R4 are as defined herein.		
대표청구항	1. A compound of formula (I): [Image]or a pharmaceutically acceptable salt thereof, wherein A1 is selected from N and CR1;A2 is selected from N and CR2;A3 is selected from N and CR3; wherein at least one of A1, A2, and A3 is N; and A1 and A2 are not simultaneously N;R1 is selected from H, F, Cl, Br, NO2, CN, NRaRa, C1-6alkyl substituted with 0-5 R1a, C2-6alkenyl substituted with 0-5 R1a, C2-6alkynyl substituted with 0-5 R1a, —O—C1-6alkyl, —O—(CHR)r-carbocyclyl substituted with 0-5 R1a, —(CHR)r-carbocyclyl substituted with 0-5 R1a, and —(CHR)r-heterocyclyl substituted with 0-5 R1a;R1a, at each occurrence, is independently selected from C1-6alkyl substituted with 0-5 Re, C2-6alkenyl substituted with 0-5 Re, C2-6alkynyl substituted with 0-5 Re, C1-6haloalkyl, F, Cl, Br, NO2, CN, —(CHR)rOH, —(CHR)rSH, —(CHR)rORb, —(CHR)rS(O)pRb, —(CHR)rC(O)Rd, —(CHR)rNRaRa, —(CHR)rC(O)NRaRa, —(CHR)rC(O)NRaORb, —(CHR)rNRaC(O)Rd, —(CHR)rNRaC(O)ORb, —(CHR)rOC(O)NRaRa, —(CHR)rC(O)ORd, —(CHR)rS(O)pNRaRa, —(CHR)rNRaS(O)pRb, —(CHR)rNRaP(O)pRb, —(CHR)r—C3-6-carbocyclyl substituted with 0-5 Re and/or —(CHR)r-heterocyclyl substituted with 0-5 Re;R2 is selected from H, F, Cl, Br, NO2, CN, NRaRa, C1-6alkyl substituted with 0-5 R2a, C2-6alkenyl substituted with 0-5 R2a, C2-6alkynyl substituted with 0-5 R2a, —O—C1-6alkyl substituted with 0-5 R2a, —O—(CHR)r-carbocyclyl substituted with 0-5 R2a, —(CHR)r-carbocyclyl substituted with 0-5 R2a, and —(CHR)r-heterocyclyl substituted with 0-5 R2a;R2a, at each occurrence, is independently selected from C1-6alkyl, C2-6alkenyl, C2-6alkynyl, C1-6haloalkyl, —(CH2)rC3-10-cycloalkyl, F, Cl, Br, NO2, CN, —(CHR)rOH, —(CHR)rSH, —(CHR)rORb, —(CHR)rS(O)pRb, —(CHR)rC(O)Rd, —(CHR)rNRaRa, —(CHR)rC(O)NRaRa, —(CHR)rC(O)NRaORb, —(CHR)rNRaC(O)NRaRa, —(CHR)rNRaC(O)ORb, —(CHR)rOC(O)NRaRa, —(CHR)rC(O)ORd, —(CHR)rC(O)C(O)ORd, —(CHR)rS(O)pNRaRa, —(CHR)rNRaS(O)pRb, —(CHR)rC(O)NRaS(O)pRb, —(CHR)rC(O)NRa(CHR)rC(O)ORd, —(CHR)r-carbocyclyl substituted with 0-5 Re and/or		

	—(CHR)r-heterocyclyl substituted with 0-5 Re;R3 is selected from H, F, Cl, Br, NO2, CN, C1-6alkyl substituted with 0-5 R3a, C2-6alkenyl substituted with 0-5 R3a, C2-6alkynyl substituted with 0-5 R3a, —O—C1-6alkyl substituted with 0-5 R3a, —O-carbocyclyl substituted with 0-5 R3a, —(CHR)r-carbocyclyl substituted with 0-5 R3a and —(CHR)r-heterocyclyl substituted with 0-5 R3a;R3a, at each occurrence, is independently selected from C1-6alkyl, C2-6alkenyl, C2-6alkynyl, C1-6haloalkyl, —(CH2)rC3-10cycloalkyl, F, Cl, Br, NO2, CN, —(CHR)rOH, —(CHR)rSH, —(CHR)r—O—(CHR)rRb, —(CHR)rS(O)pRb, —(CHR)rC(O)Rd, —(CHR)rNRaRa, —(CHR)rC(O)NRaRa, —(CHR)rC(O)NRaORb, —(CHR)rNRaC(O)Rd, —(CHR)rNRaC(O)ORb, —(CHR)rOC(O)NRaRa, —(CHR)rC(O)ORd, —(CHR)rS(O)pNRaRa, —(CHR)rNRaS(O)pRb, —(CHR)r-aryl substituted with 0-5 Re, and/or —(CHR)r-heterocyclyl substituted with 0-5 Re;alternatively, R1 and R2, or R2 and R3, are taken together with the ring atoms to which they are attached to form a fused carbocyclyl or heterocyclyl;R4 is selected from carbocyclyl substituted with 0-5 R4a and heterocyclyl substituted with 0-5 R4a;R4a, at each occurrence, is independently selected from F, Cl, Br, NO2, CN, C1-6alkyl, C2-6alkenyl, C2-6alkynyl, C1-6haloalkyl, —(CHR)rOH, —(CHR)rSH, —(CHR)r—O—(CHR)rRc, —(CHR)rS(O)p(CHR)rRb, —(CHR)rC(O)Rd, —(CHR)rNRaRa, —(CHR)rC(O)NRaRa, —(CHR)rC(O)NRaORb, —(CHR)rNRaC(O)Rd, —(CHR)rNRaC(O)ORb, —(CHR)rOC(O)NRaRa, —(CHR)rC(O)ORd, —(CHR)rS(O)pNRaRa, —(CHR)rC3-6-carbocyclyl substituted with 0-5 Re, and/or —(CHR)r-heterocyclyl substituted with 0-5 Re;R, at each occurrence, is independently selected from H, C1-6alkyl, C1-6haloalkyl, and/or —(CH2)r-aryl;Ra, at each occurrence, is independently selected from H, NH2, C1-6alkyl substituted with 0-3 Re, C2-6alkenyl substituted with 0-3 Re, C2-6alkynyl substituted with 0-3 Re, C1-6haloalkyl, —O—C1-6alkyl substituted with 0-3 Re, —(CH2)rOH, (CH2)rC3-10 carbocyclyl substituted with 0-3 Re, and/or —(CH2)r-heterocyclyl substituted with 0-3 Re, or Ra and Ra, together with the nitrogen atom to which they are both attached, form a heterocyclyl substituted with 0-3 Re;Rb, at each occurrence, is independently selected from C1-6alkyl substituted with 0-3 Re, C1-6haloalkyl, C2-6alkenyl substituted with 0-3 Re, C2-6alkynyl substituted with 0-3 Re, —(CH2)rC3-10-carbocyclyl substituted with 0-3 Re, and/or —(CH2)r-heterocyclyl substituted with 0-3 Re;Rc, at each occurrence, is independently selected from C1-6alkyl substituted with 0-3 Rg, C2-6alkenyl substituted with 0-3 Rg, C2-6alkynyl substituted with 0-3 Rg, C1-6haloalkyl, —(CH2)rOH, —(CH2)r—C3-10carbocyclyl substituted with 0-3 Rg, and/or —(CH2)rheterocyclyl substituted with 0-3 Rg;Rd, at each occurrence, is independently selected from H, C1-6alkyl substituted with 0-3 Re, C1-6haloalkyl, C2-6alkenyl substituted with 0-3 Re, C2-6alkynyl substituted with 0-3 Re, —(CH2)r—C3-10carbocyclyl substituted with 0-3 Re, and/or —(CH2)r-heterocyclyl substituted with 0-3 Re;Re, at each occurrence, is independently select...

□ KR10-1237573

진세노사이드의 면역성 질환의 예방 및 치료 용도			
문헌번호 (문헌일)	KR10-1237573 (2013-02-20)	출원번호 (출원일)	10-2011-0003063 (2011-01-12)
출원인	충남대학교 (KR)	기술분류	인터루킨/화합물
요약	본 발명은 진세노사이드(ginsenoside) Rg6 및 진세노사이드(ginsenoside) F4로 이루어진 군에서 선택되는 하나 이상의 화합물을 유효성분으로 포함하는 면역성 질환의 예방 및 치료용 의약, 식품 및 화장료 조성물에 관한 것이다. 본 발명의 진세노사이드(ginsenoside) Rg6 및 진세노사이드(ginsenoside) F4는 인터루킨-12 (Interleukin-12), 인터루킨-6 (Interleukin-6) 및 TNF(Tumor necrosis factor)-α 생산 저해 효과가 우수하여, 이들로 인해 유발되는 자가 면역 질환과 패혈증 등과 같은 면역성 질환의 치료에 유용하게 활용될 수 있다.		
대표청구항	증숙 인삼의 잎과 꽃에서 분리한, 인터루킨-12, 인터루킨-6 및 TNF-α 생산 억제 활성이 있는 진세노사이드(ginsenoside) Rg6 및 진세노사이드(ginsenoside) F4로 이루어진 군에서 선택되는 하나 이상의 화합물을 유효성분으로 포함하는 면역성 질환의 예방 및 치료용 의약 조성물.		

□ KR10-1537148

푸리논 유도체			
문헌번호 (문헌일)	KR10-1537148 (2015-07-09)	출원번호 (출원일)	10-2012-7031149 (2011-05-30)
출원인	ONO PHARMA (JP)	기술분류	BTK/화합물
요약	하기 화학식 (I)(식 중, 모든 기호는 명세서 기재와 같음)로 표시되는 화합물은, Btk 선택적 저해 활성을 갖는 것에 덧붙여, 대사 안정성이 우수하고, 간독성 등을 회피할 수 있는 화합물이기 때문에, 안전한 B 세포나 비만세포가 관여하는 질환의 치료제가 될 수 있다.		
대표청구항	6-아미노-9-[(3R)-1-(2-부티노일)-3-피롤리디닐]-7-(4-페녹시페닐)-7,9-디히드로-8H-푸린-8-온, 또는 이의 염.		

□ JP5917544

JAK 억제제로서의 헤테로 고리 치환 피롤로피리딘 및 피롤로피리미딘			
문헌번호 (문헌일)	JP5917544 (2016-04-15)	출원번호 (출원일)	2013-540045 (2011-11-18)
출원인	INCYTE (US)	기술분류	야누스 키나아제/화합물
요약	【요약】 본 발명은 야누스 키나제(JAK)의 활성을 조절하고 예를 들면 염증성 장애, 자기면역 장애, 암 및 다른 질환을 포함한, JAK의 활성에 관련된 질환 치료에 유용한 식 I(식 중, X, Y, Z, L, A, R5, n, m 및 r는 위에 정의된다)의 헤테로 고리 치환 피롤로피리딘 및 피롤로피리미딘 및 이들의 조성물 및 사용 방법을 제공한다. [Image]		

대표청구항	【청구항1】식 I:【화1】[Image][식 중: X는 N이며 Z는 N이며 L는 O이며 Y는 시아노이며 R 1 , R 2 및 R 3 (은)는 각각 H이며 각 R 5 (은)는 불소이며 A는 1, 2, 3, 4, 또는 5개의 독립적으로 선택된 R 7 치환기로 임의로 치환된, 페닐이며 각 R 7 (은)는 독립적으로 할로, 시아노, C 1-6 알킬, C 1-6 할로알킬, -C(=O) R b 및—C(=O) NR e R f 에서 선택되고 상기 C 1-6 알킬은 임의로 1, 2, 3, 또는 4개의 독립적으로 선택된 R g 기로 치환되어 각 R g (은)는 독립적으로 할로, 시아노, C 1-6 알킬, C 2-7 헤테로사이클로알킬, -C(=O) NR e1 R f1 및—NR e1 R f1 에서 선택되고 상기 C 1-6 알킬 및 C 2-7 헤테로사이클로 알킬은 임의로 1개 또는 2개의 독립적으로 선택된 R h 기로 치환되어 각 R h (은)는 독립적으로 할로, C 1-4 알킬 및 C 1-4 알콕시에서 선택되고 각 R e (은)는 독립적으로 H, C 1-6 알킬, C 1-6 할로알킬, C 3-7 사이클로알킬 및 C 2-7 헤테로사이클로 알킬에서 선택되고 상기 C 1-6 알킬, C 3-7 사이클로알킬 및 C 2-7 헤테로사이클로 알킬은 각각 임의로 1, 2, 3, 또는 4개의 독립적으로 선택된 R g 기로 치환되어 각 R f (은)는 독립적으로 H 및 C 1-6 알킬에서 선택되고 각 R b (은)는 독립적으로 C 1-6 알킬, C 1-6 할로알킬, C 3-7 사이클로알킬 및 C 2-7 헤테로사이클로 알킬에서 선택되고 상기 C 1-6 알킬, C 3-7 사이클로알킬 및 C 2-7 헤테로사이클로 알킬은 임의로 1, 2, 3, 또는 4개의 독립적으로 선택된 R g 기로 치환되어 각 R e1 (은)는 독립적으로 H, C 1-6 알킬, C 1-6 할로알킬, C 3-7 사이클로알킬 및 C 2-7 헤테로사이클로 알킬에서 선택되고 상기 C 1-6 알킬, C 3-7 사이클로알킬 및 C 2-7 헤테로사이클로 알킬은 각각 임의로 1, 2, 3, 또는 4개의 독립적으로 선택된 R h 기로 치환되어 각 R f1 (은)는 독립적으로 H 및 C 1-6 알킬에서 선택되고 m는 1이며 n는 0또는 1이며 r는 1이다.]의 화합물, 또는 그 약학적으로 허용되는 염.

□ US8404641

Macrocyclic lactone compounds and methods for their use			
문헌번호 (문헌일)	US8404641 (2013-03-26)	출원번호 (출원일)	13/333573 (2011-12-21)
출원인	ELIXIR MEDICAL (US)	기술분류	인터루킨/화합물
요약	A method of inhibiting cell migration or treating an inflammatory condition, comprising administering a compound disclosed herein to the subject, is provided. The compound can be administered systemically, locally, or a combination thereof. For example, the compound can be locally delivered from a temporary device or an implant, such as a vascular prosthesis.		
대표청구항	1. A method of inhibiting cell migration or treating an inflammatory condition mediated by at least one of IL-6, MMP-9, MCP-1, or IL-10 in a subject, comprising administering to the subject a macrocyclic lactone of a compound of the formula [Image]		

□ KR10-1404257

옥타플로레톨 에이 화합물을 유효성분으로 포함하는 염증질환 또는 면역질환의 예방 및 치료용 조성물			
문헌번호 (문헌일)	KR10-1404257 (2014-05-29)	출원번호 (출원일)	10-2012-0043174 (2012-04-25)
출원인	제주대학교 (KR)	기술분류	인터루킨/화합물
요약	본 발명은 옥타플로레톨 에이 화합물을 유효성분으로 포함하는 염증질환 또는 면역질환의 예방 및 치료용 조성물에 관한 것으로서, 본 발명에 따른 옥타플로레톨 에이 화합물은 염증반응을 유발시키는 자극인자에 의한 대식세포 및 수지상세포에서 염증성 사이토카인인 IL-12, IL-6 및 TNF-α의 생성을 억제하는 활성이 우수하고, MAPK 및 NF-κB의 활성을 억제하는 효과가 우수하여 과다한 염증반응으로 유발될 수 있는 염증질환 및 면역질환의 치료제 개발에 유용하게 사용될 수 있고, 또한 본 발명에 따른 옥타플로레톨 에이 화합물은 해조류인 넓패로부터 분리 및 정제된 것으로서 세포에 독성을 유발하지 않기 때문에 체내 안정한 특징이 있어 기능성 건강식품의 소재로도 사용할 수 있는 효과가 있다.		
대표청구항	하기 화학식 1로 표시되는 옥타플로레톨 에이(octaphlorethol A)를 유효성분으로 포함하는 염증성 사이토카인 과다발현에 의한 염증질환 또는 면역질환의 예방 및 치료용 약학적 조성물;[화학식 1][이미지] .		

□ KR10-1413207

염증성 질환의 예방 또는 치료용 약학 조성물 및 건강기능식품			
문헌번호 (문헌일)	KR10-1413207 (2014-06-23)	출원번호 (출원일)	10-2012-0063767 (2012-06-14)
출원인	부산대학교 (KR)	기술분류	인터루킨/화합물
요약	본 발명은 염증성 질환의 예방 또는 치료용 약학 조성물 및 건강기능식품에 관한 것으로, 보다 상세하게는 본 발명의 화학식 1의 화합물은 활막 조직에서 염증성 사이토카인 생성을 억제하고, 관절염 발병 및 심화를 완화하며, TNF-α, IL-1 β, IL-6, IFN-γ, MCP-1 및 IL-17 등의 혈액 내 염증성 사이토카인을 억제하는 바, 이를 포함하는 개선된 효능을 갖는 염증성 질환의 예방 또는 치료용 약학 조성물 및 건강기능식품에 관한 것이다.		
대표청구항	하기 화학식 1로 표시되는 화합물 또는 이의 약학적으로 허용되는 염을 포함하는 관절염의 예방 또는 치료용 약학 조성물:[화학식 1][이미지].		

□ KR10-1936851

단백질 키나아제 저해제인 신규 피라졸로피리딘 유도체 또는 인다졸 유도체			
문헌번호 (문헌일)	KR10-1936851 (2019-01-03)	출원번호 (출원일)	10-2012-0077013 (2012-07-16)
출원인	한국과학기술연구원 (KR)	기술분류	야누스 키나아제/화합물

요약	본 발명은 단백질 키나아제에 대한 저해활성을 가지는 신규 피라졸로피리딘 또는 인다졸 유도체 또는 이의 약학적으로 허용 가능한 염에 관한 것이다. 본 발명의 화합물은 단백질 키나아제 예를 들면 ABL, ACK1, ALK, Aurora A, Aurora B, Aurora C, BLK, BMX/ETK, BRSK1, BTK, c-Src, CAMKK, CDK1, CDK2, CDK5, CLK, DDR, DYRK1B, EPHA, EPHB, FAK/PTK2, FER, FES/FPS, FGFR, FGR, FLT3, FLT4/VEGFR3, FMS, FRK/PTK5, FYN, GSK3b, HCK, IGF1R, IR, IRAK1, IRR/INSRR, ITK, JAK2, KHS/MAP4K5, LCK, LYN, PHKg, PLK4/SAK, PYK2, RET, ROS/ROS1, TIE2/TEK, TRK, TXK, TYK, YES/YES1 등에 대하여 우수한 저해활성을 가지므로 각종 암질환의 치료 및 예방을 위한 약물로 유용하다.
대표청구항	하기 화학식 1로 표시되는 화합물, 이의 약학적으로 허용되는 염, 이의 수화물 또는 이의 용매화물 중에서 선택된 화합물 : [화학식 1][이미지]상기 화학식 1에서,X는 N을 나타내며,P는 수소원자를 나타내며,L1은 -S(O)2R1을 나타내며, 이때 R1은 1 내지 3개의 할로겐원자로 치환된 페닐기를 나타내며,G는 -NHC(O)-를 나타내며,L2는 (4-메틸피페라지닐)페닐기를 나타낸다.

□ KR10-1417341

아포-9''-푸코잔티논 화합물을 유효성분으로 포함하는 염증질환 또는 면역질환의 예방 및 치료용 조성물

문헌번호 (문헌일)	KR10-1417341 (2014-07-01)	출원번호 (출원일)	10-2012-0102646 (2012-09-17)
출원인	제주대학교 (KR)	기술분류	인터루킨/화합물
요약	본 발명은 경단구슬모자반 추출물 및 아포-9'-푸코잔티논(apo-9'-fucoxanthinone) 화합물을 유효성분으로 포함하는 염증질환 또는 면역질환의 예방 및 치료용 조성물에 관한 것으로서, 본 발명에 따른 경단구슬모자반 추출물 및 아포-9'-푸코잔티논 화합물은 염증반응을 유발시키는 자극인자에 의한 대식세포 및 수지상세포에서 염증성 사이토카인인 IL-12, IL-6 및 TNF-α의 생성을 억제하는 활성이 우수하고, MAPK 및 AP-1의 활성을 억제하는 효과가 우수할 뿐만 아니라 다양한 면역 염증질환의 발병 기작에 관여하는 것으로 알려진 NLRP3 인플라마좀의 활성을 억제하여 궁극적으로 과다한 면역 염증반응으로 유발될 수 있는 염증질환 및 면역질환의 치료제 개발에 유용하게 사용될 수 있고, 또한 본 발명에 따른 경단구슬모자반 추출물 및 아포-9'-푸코잔티논은 식용 가능한 천연물로부터 유래된 것으로서 세포에 독성을 유발하지 않기 때문에 체내 안정한 특징이 있어 의약품 및 기능성 건강식품의 소재로도 안전하게 사용할 수 있는 효과가 있다.		
대표청구항	하기 화학식 1로 표시되는 아포-9'-푸코잔티논(apo-9'-fucoxanthinone)을 유효성분으로 포함하는 염증질환 또는 면역질환의 예방 및 치료용 약학적 조성물;[화학식 1][이미지].		

□ KR10-1460237

히스피딘을 유효성분으로 포함하는 염증성 장질환 예방 또는 치료용 약학조성물			
문헌번호 (문헌일)	KR10-1460237 (2014-11-04)	출원번호 (출원일)	10-2012-0103785 (2012-09-19)
출원인	건국대학교 (KR)	기술분류	인터루킨/화합물
요약	본 발명은 염증성 장질환 예방 또는 치료용 약학조성물에 관한 것이다 상기와 같은 본 발명에 따르면, 염증성 사이토카인인 TNF-α(tumor necrosis factors-α), IL-1β(interleukin-1β), IL-4(interleukin-4)의 발현을 억제하여 염증반응을 억제하는 효과를 가지는 상황버섯으로부터 분리된 히스피딘(hispidin)을 유효성분으로 포함하는 염증성 장질환 예방 또는 치료용 약학조성물을 제공함으로써, 상황버섯에서 분리한 히스피딘(hispidin)을 염증성 장질환 예방 또는 치료용으로 활용하여 생약 추출물을 이용함으로서 부작용이 없는 약학조성물을 제공할 수 있는 효과가 있다.		
대표청구항	TNF-α, IL-1β 또는 IL-6의 발현을 억제하여 염증반응을 억제하는 효과를 가지는 상황버섯에서 추출된 하기 화학식 1로 표시되는 히스피딘(hispidin)과 밀크티슬 분말, L-아르기닌, 오미자 추출물, 효모추출물, 타우린, 산화마그네슘, L-아스파라긴, 비타민 C, 울금추출물, 비타민 E, L-라이신염산염, 산화아연, 옥타코사놀, L-시스틴, 피에이취칼라 Ⅰ 혼합제제, 스테아린산마그네슘, 히드록시프로필메틸셀룰로오스 및 글리세린지방산에스테르로 이루어진 군에서 선택된 하나 이상을 포함하는 염증성 장질환 예방 또는 치료용 약학조성물. [화학식 1][이미지]		

□ US8741905

Compounds and methods for treating autoimmune diseases			
문헌번호 (문헌일)	US8741905 (2014-06-03)	출원번호 (출원일)	13/887466 (2013-05-06)
출원인	THE BROAD INSTITUTE (US)	기술분류	야누스 키나아제/화합물
요약	The invention relates to a compound of Formula I:		
대표청구항	1. A compound of Formula I or a prodrug or metabolite thereof; [Image]wherein,each X1 and X3 is independently —O— or —S—;each X4, X5 and X6 is independently —CH or —N—;each X2, Y1 and Y2 is independently —NR10, —S— or —O—;Cy1 is an optionally substituted aryl group;Cy2 is an optionally substituted cycloalkyl, optionally substituted cycloalkenyl, optionally substituted heterocyclyl or optionally substituted aryl containing one, two or three rings;R1 is hydrogen, halogen, aliphatic, substituted aliphatic, aryl or substituted aryl;each R2, R3, R4 and R5 is independently selected from absent, hydrogen, halogen, —OR10, —SR10, —NR10R11, —C(O)R10, —C(O)OR10, —C(O)NR10R11, —N(R10)C(O)R11, —CF3, —CN, —NO2, —N3, acyl, alkoxy, substituted alkoxy, alkylamino, substituted		

	alkylamino, dialkylamino, substituted dialkylamino, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylsulfonyl, optionally substituted aliphatic, optionally substituted aryl or optionally substituted heterocyclyl;G1 is —N(R10)C(O)—, —N(R10)C(S)—, —N(R10)S(O)2—, —N(R10)S(O)2—[C(R10)(R11)]W—, —N(R—10)C(O)—[C(R10)(R11)]W—, —N(R10)C(S)—[C(R10)(R11)]W—, —N(R10)C(O)N(R11)—, —N(R—10)C(S)N(R11)—, —C(O)O— or —C(O)O—[C(R10)(R11)]W—;each n and m is independently selected from 0, 1, 2 or 3;each v and w is independently selected from 0, 1, 2, 3, 4, 5 or 6;each R10, R11, R12, R13 and R14 is independently absent, hydrogen, halogen, OH, —SH, —NH2, —CF3, —CN, —NO2, —N3, —C(O)OH, —C(O)NH2, acyl, alkoxy, substituted alkoxy, alkylamino, substituted alkylamino, dialkylamino, substituted dialkylamino, substituted or unsubstituted alkylthio, substituted or unsubstituted alkylsulfonyl, aliphatic, substituted aliphatic, aryl or substituted aryl; alternatively two of R10, R11, R12, R13 and R14 together with the atoms to which they are attached and any intervening atoms may form an additional optionally substituted, 3, 4, 5, 6 or 7 membered ring.

□ KR10-1501375

메트포민을 유효성분으로 함유하는 염증성 장질환의 예방 또는 치료용 조성물			
문헌번호 (문헌일)	KR10-1501375 (2015-03-04)	출원번호 (출원일)	10-2013-0111679 (2013-09-17)
출원인	가톨릭대학교 (KR)	기술분류	인터루킨/화합물
요약	본 발명은 메트포민을 유효성분으로 포함하는 염증성 장질환의 예방 또는 치료용 조성물에 관한 것으로, 본 발명에 따른 메트포민(metformin) 화합물 또는 메트포민과 이타너셉트(etanercept, 제품명: 엔브렐)의 복합체는 소장의 두께 및 대장의 길이를 정상과 같이 유지 시키는 효과가 우수하고, IL-17 및 TNF-a의 활성을 억제 또는 감소시키는 효과가 우수하며, IFNr의 활성을 촉진 또는 증가시키는 효과가 우수하여 염증성 장질환 포함 자가면역질환을 예방 또는 치료할 수 있는 약학적 조성물로 유용하게 사용할 수 있다.		
대표청구항	하기 화학식 1로 표시되는 메트포민(metformin) 화합물 또는 그의 약학적으로 허용 가능한 염; 및 TNF-a 차단제를 유효성분으로 포함하는 염증성 장질환의 예방 또는 치료용 조성물;화학식 1[이미지].		

□ US8987298

Indazole inhibitors of the Wnt signal pathway and therapeutic uses thereof			
문헌번호 (문헌일)	US8987298 (2015-03-24)	출원번호 (출원일)	14/178749 (2014-02-12)
출원인	SAMUMED (US)	기술분류	야누스 키나아제/화합물
요약	Indazole compounds for treating various diseases and pathologies are disclosed. More particularly, the present invention concerns the use of an indazole compound or analogs thereof, in the treatment of disorders characterized by the activation of Wnt pathway signaling (e.g., cancer, abnormal cellular proliferation, angiogenesis, Alzheimer's disease, lung disease and osteoarthritis), the modulation of cellular events mediated by Wnt pathway signaling, as well as genetic diseases and neurological conditions/disorders/diseases due to mutations or dysregulation of the Wnt pathway and/or of one or more of Wnt signaling components. Also provided are methods for treating Wnt-related disease states.		
대표청구항	1. A method for treating cancer in a mammal, the method comprising administering to the mammal a therapeutically effective amount of a compound of Formula I, or a pharmaceutically acceptable salt thereof: [Image]wherein:R1 is -heteroarylR3R4;R2 is selected from the group consisting of H, -heteroarylR5, -heterocyclylR6 and -arylR7;R3 is selected from the group consisting of H, -heterocyclylR8, —NHC(═O)R9, —NHSO2R10, —NR11R12 and —(C1-6 alkyl)NR11R12;wherein R2 and R3 are not both H;R4 is 1-3 substituents each selected from the group consisting of H, halide, —CF3, —CN, OR13 and amino;each R5 is independently 1-4 substituents each selected from the group consisting of H, C1-9 alkyl, halide, —CF3, —CN, OR13, —C(═O)R11, amino and —(C1-6 alkyl)NR11R12;each R6 is independently 1-5 substituents each selected from the group consisting of H, C1-9 alkyl, halide, —CF3, —CN, OR13 and amino;each R7 is independently 1-5 substituents each selected from the group consisting of H, C1-9 alkyl, halide, —CF3, —CN, OR13, amino, —(C1-6 alkyl)NHSO2R11, —NR12(C1-6 alkyl)NR11R12 and —(C1-6 alkyl)NR11R12;R8 is 1-5 substituents each selected from the group consisting of H, C1-9 alkyl, halide, —CF3, —CN, OR13 and amino;R9 is selected from the group consisting of C1-9 alkyl, -heteroarylR5, -heterocyclylR6, -arylR7 and —CH2carbocyclyl;R10 is selected from the group consisting of C1-9 alkyl, -heteroarylR5, -heterocyclylR6, -arylR7, and -carbocyclylR14;each R11 is independently selected from C1-6 alkyl;each R12 is independently selected from the group consisting of H and C1-6 alkyl;each R11 and R12 are optionally linked to form a five or six membered heterocyclyl ring;each R13 is independently selected from the group consisting of H and C1-6 alkyl; andR14 is 1-5 substituents each selected from the group consisting of H, C1-9 alkyl, halide, —CF3, —CN, OR13 and amino;with the proviso that the compound of Formula I is not a compound selected from the group consisting of: [Image] [Image] [Image] [Image]		

□ US8962635

Tyrosine kinase inhibitors			
문헌번호 (문헌일)	US8962635 (2015-02-24)	출원번호 (출원일)	14/341421 (2014-07-25)
출원인	PRINCIPIA BIOPHARMA (US)	기술분류	BTK/화합물
요약	The present disclosure provides compounds and pharmaceutically acceptable salts thereof that are tyrosine kinase inhibitors, in particular BLK, BMX, EGFR, HER2, HER4, ITK, TEC, BTK, and TXK and are therefore useful for the treatment of diseases treatable by inhibition of tyrosine kinases such as cancer and inflammatory diseases such as arthritis, and the like. Also provided are pharmaceutical compositions containing such compounds and pharmaceutically acceptable salts thereof and processes for preparing such compounds and pharmaceutically acceptable salts thereof.		
대표청구항	1 . 3-[(3R)-3-[4-amino-3-(2-fluoro-4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl]piperidin-1-yl]-3-oxopropanenitrile having the structure [Image]		

□ US9527847

Treatment of lupus, fibrotic conditions, and inflammatory myopathies and other disorders using PI3 kinase inhibitors			
문헌번호 (문헌일)	US9527847 (2016-12-27)	출원번호 (출원일)	14/448998 (2014-07-31)
출원인	INFINITY PHARMACEUTICALS (US)	기술분류	종양괴사인자/화합물
요약	Provided herein are methods, kits, and pharmaceutical compositions that include a PI3 kinase inhibitor for treating lupus, a fibrotic condition, or inflammatory myopathies and other conditions (e.g., skin conditions).		
대표청구항	1. A method for treating a disorder comprising administering a PI3K inhibitor to a subject in need thereof, in an amount sufficient to decrease or inhibit the disorder in the subject, wherein the disorder is a fibrotic condition, inflammatory myopathy, or skin condition, wherein decreasing or inhibiting the disorder comprises decreasing a level of one or more of IFN-α, IL-6, IL-8, or IL-1 in the subject or in a sample derived from the subject.		

□ US9738660

Selective inhibitors for protein kinases and pharmaceutical composition and use thereof			
문헌번호 (문헌일)	US9738660 (2017-08-22)	출원번호 (출원일)	14/599349 (2015-01-16)
출원인	NATIONAL CHIAO TUNG UNV (TW)	기술분류	야누스 키나아제/화합물
요약	The present invention provides a compound of formula (I) or the salt thereof: [Image]wherein R is at least one selected from the group consisting of unsubstituted C1-4 alkyl, C1-4 alkyl substituted by C6-18 aryl or —OR1, and —C(═O)Z. The compound is a type-S protein kinase inhibitor, which binds to an ATP-binding site and a substrate-recognition site of a protein kinase simultaneously. The present invention further provides a pharmaceutical composition, which includes a compound of formula (I) or a salt and a pharmaceutically acceptable carrier thereof. The present invention further provides a use of a compound of formula (I) or a salt thereof, which is for the manufacture of a protein kinase inhibitor as a drug.		
대표청구항	1. A compound of formula (I) or the salt thereof: [Image]wherein R is one selected from the group consisting of [Image]		

□ CN105367555

Substituted heteroaryl compound and composition and application thereof			
문헌번호 (문헌일)	CN105367555 (2019-06-25)	출원번호 (출원일)	2015-10475504 (2015-08-06)
출원인	DONGYANGGUANG PHARMACEUTICAL (CN)	기술분류	야누스 키나아제/화합물
요약	The invention provides a substituted heteroaryl compound, a composition thereof and application of the substituted heteroaryl compound and the composition. The compound is a compound shown in a formula (I) or a stereisomer, or a tautomer, or nitric oxide, or solvate, or a metabolite, or a pharmaceutically acceptable salt or a prodrug of the compound shown in the formula (I). The invention further provides the drug composition containing the compound, and the compound and the drug composition can adjust activity of JAK kinase and are used for preventing, handling, treating, and relieving diseases or disorder mediated by the JAK kinase.		
대표청구항	1. a kind of compound is the pharmaceutically acceptable salt of compound shown in formula (I) compound represented or formula (I),Wherein,Z isWherein, formula (Z-55) each minor structure shown in~(Z-61) is optionally by 1,2 or 3 R2Replaced group ; Z1For H or C1-C6Alkyl ; A isWherein, each minor structure shown in		

	formula (H), (I) or (J) is individually optional Ground is by 1,2 or 3 R4Replaced group ; W is CH or N ; Each R1It independently is H, F, Cl, Br, I, NO2、N3、CN、C1-C6Alkyl or C1-C6Halogenated alkyl ; Each R2And R4It is separately H, F, Cl, Br, I, NO2、CN、N3、OH、NH2,-C (=O) CH2CN ,-NHC (=O) CH2CN、-N(CH3) C (=O) CH2CN、C1-C6Alkyl or C1-C6Halogenated alkyl ; Q is 1,2,3,4 or 5.

□ US9669028

Substituted 5-(pyrazin-2-yl)-1H-pyrazolo [3, 4-B] pyridine and pyrazolo [3, 4-B] pyridine derivatives as protein kinase inhibitors			
문헌번호 (문헌일)	US9669028 (2017-06-06)	출원번호 (출원일)	14/871278 (2015-09-30)
출원인	ARRIEN PHARMACEUTICALS (US)	기술분류	야누스 키나아제/화합물
요약	Substituted 5-(pyrazin-2-yl)-1H-pyrazolo[3,4-b]pyridine, 5-(pyrazin-2-yl)-1H-pyrrolo[2,3-b]pyridine and pyrazolo[3,4-b]pyridine derivatives according to formula I, II and VII, and methods for making same, which are inhibitors of constitutively activated Tyrosine Kinase-Like (TKL), CMGC protein kinases family members and can be useful in the treatment of Parkinson's disease, Alzheimer's disease, Down's Syndrome, Huntington's disease, other neurodegenerative and central nervous system disorders, cancer, metabolic disorders and inflammatory diseases. Also disclosed are pharmaceutical compositions including the compounds and methods of inhibiting wild type and/or mutated protein kinase activities of these families and the treatment of disorders associated therewith using compounds and pharmaceutical compositions including the compounds.		
대표청구항	1. A compound of the Formula II [Image]whereinQ is —NH, —O, —NCH3, —NHCO, —CONH, substituted or unsubstituted pyrazine, substituted or unsubstituted 5-membered aryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, S(O)n, substituted or unsubstituted C1-C5 alkylene, substituted or unsubstituted 2 to 5 membered heteroalkylene, where "n" is an integer from 1 to 2, or one of [Image]wherein [Image] indicates the attachment to Q of Formula II;L1 is independently a direct bond, substituted or unsubstituted 6-membered aryl, heteroaryl, substituted or unsubstituted 5-membered aryl or heteroaryl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, —C(O)n, S(O)n, —O, —NH, substituted or unsubstituted C1-C5 alkylene, substituted or unsubstituted 2 to 5 membered heteroalkylene groups; where "n" is from 0 to 2, hydrogen, —CH3, halo, —OCH3, —CF3, OCF3, —CN, —NH2, —CH2OCF2, —COOH, —OR4 —SR4, —NHR4, —C(O)R4—, —C(S)R4, —C(O)NR4, and —S(O)2R4, —S(O)2NHR4, —NHCOR4, —CONHR4, CONR4, —CH═CHR4, —NCH3R4,R4 is optionally substituted at each occurrence and is selected from alkyl, heteroaryl, cycloalkyl, heterocycloalkyl, —C1-6 alkyl, —C1-4		

	haloaliphatic, —C2-6 alkenyl, mono/dialkylamino, aryl C4-7 heterocycloalkyl, —C5-6 aryl and, wherein the functional groups are each optionally substituted with one or more of fluoro, —NH2, hydroxyl, fluoro substituted lower alkyl, alkoxy, alkylthio, mono/dialkylamino and cycloalkylamino functional groups or additional substituents selected from —NR5R6 and —CR5R6 respectively, and whereinR4 together with the carbon to which it is attached may form a 3-7 member monocyclic cycloalkyl, 5-6 membered monocyclic heterocycloalkyl, heterocycloalkyl, heteroaryl; wherein the monocyclic cycloalkyl or heterocycloalkyl are each independently optionally substituted with one or more of fluoro, —NH2, hydroxyl, fluoro substituted lower alkyl, alkoxy, alkylthio, mono/dialkylamino and cycloalkylamino;R5 and R6 are each independently —H, cycloalkyl, alkyl, heterocycloalkyl, aryl, heteroaryl, —C1-6 alkyl, —C3-7 cycloalkyl, —C3-6 heterocyclocycloalkyl, each optionally substituted with one or more of fluoro, —NH2, hydroxyl, fluoro substituted C1-6 alkyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, alkoxy, alkylthio, mono/dialkylamino and cycloalkylamino;wherein L1 is optionally substituted with —R7 or Y9;wherein R7 is independently a bond, substituted or unsubstituted —C═S, C═O, —C1-6 alkyl, each optionally further substituted by C1-6 alkyl, (for example, (—CH2)n, wherein n is an integer from 0-3), —O, —S, —SO, SO2, —NH or —CH═CH groups; andR7 may be cycloalkyl, heterocycloalkyl, aryl, or heteroaryl, C1-6 alkyl, cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl, wherein C1-6 alkyl, cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl are each optionally substituted with one or more of fluoro, —OH, —NH2, OCH3, CH2OCH3, methylthio, ethylthio, butylthio, isobutylthio, mono/dialkylamino, and alkyl carbon bound to the N of —C(O)NHR8, —C(S)NHR8 or —S(O)2NHR8; wherein the alkyl chain(s) of OCH3, CH2OCH3, methylthio, ethylthio, butylthio, isobutylthio, and mono/dialkylamino are each optionally independently substituted with one or more of fluoro, —OH, —NH2, wherein any substitution of the alkyl chain carbon bound to O of alkoxy, S of thioalkyl or N of mono/dialkylamino is fluoro;R8 combines with the nitrogen to which it is attached to form a 5-7 member heterocycloalkyl optionally substituted with one or more of fluoro, —OH, —NH2, C1-6 alkyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, fluoro substituted C1-6 alkyl, cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl, OCH3, CH2OCH3, fluoro substituted OCH3, CH2OCH3, methylthio, ethylthio, butylthio, isobutylthio, and fluoro-substituted methylthio, ethylthio, butylthio, isobutylthio;Y9 is —C1-6 alkyl, C3-7 cycloalkyl, —C1-6-alkyl —C3-7-cycloalkyl, —C1-6 alkyl heteroaryl, —C4-7 heterocycloalkyl, aryl or heteroaryl, each optionally independently substituted with one or more substituents selected from R4;L2 is a Formula V [Image]wherein X1 is —N, —CH;X2 is —N, —CH andX3 is —N, —CH,[Image] indicates the attachment to L2 of Formula II;R10 is —H, halo, —CN, —NH2, —C1-6 aliphatic, —OC1-6 aliphatic, —C3-6 cycloaliphatic, —OC3-6 cycloaliphatic, —NH2, —NHCOC1-6 alkyl, —NHCO1-6 cycloalkyl, —NHCO1-6 heterocycloalkyl, —CONHC1-6 alkyl, —CONH1-6 cycloalkyl, —CONH1-6 heterocycloalkyl, —NHC1-6 aliphatic, —NHC3-6 cycloaliphatic, —NHS(O)2C1-6 aliphatic, —NHS(O)2C3-6 cycloaliphatic, —NHS(O)2 phenyl, —NHS(O)2 benzyl, —NHS(O)2 heteroaryl, —S(O)2C1-6 aliphatic, —S(O)2C3-6 cycloaliphatic, —S(O)2

	phenyl, —S(O)2 benzyl, —S(O)2 heteroaryl, —S(O)2NHC1-6 aliphatic, —S(O)2NHC3-6 cycloaliphatic, —S(O)2NH phenyl, —S(O)2NH benzyl, or —S(O)2NH heteroaryl, wherein said heteroaryl of R10 is a 5- or 6 member ring having 1, 2, or 3 atoms selected from N, O, or S, and wherein said aliphatic, cycloaliphatic, phenyl, benzyl, or hetero...

□ US9840537

Selective delivery molecules and methods of use			
문헌번호 (문헌일)	US9840537 (2017-12-12)	출원번호 (출원일)	15/295482 (2016-10-17)
출원인	AVELAS BIOSCIENCES (US)	기술분류	야누스 키나아제/화합물
요약	Disclosed herein is a selective delivery molecule comprising: (a) an acidic sequence (portion A) which is effective to inhibit or prevent the uptake into cells or tissue retention, (b) a molecular transport or retention sequence (portion B), and (c) a linker between portion A and portion B, and (d) at least one cargo moiety.		
대표청구항	1. A selective delivery molecule of Formula I: [DA-cA]-A-[cM-M]X-B-[cB-DB]; Formula Iwherein, X is a peptide linker cleavable by a protease;A is a peptide with a sequence comprising a series of 5 glutamates;B is a peptide with a sequence comprising a series of 8 arginines;cA, cB, and cm each independently comprise 0-1 naturally-occurring amino acid ornon-naturally-occurring amino acid;M is a polyethylene glycol (PEG) polymer having an average molecular weight of 500 Da to 10 kDa; andDA and DB are independently selected from a therapeutic agent and an imaging agent, wherein at least one of DA and DB is a therapeutic agent; andwherein [cM-M] is bound to at any position on A or X, [DA-cA] is bound to any amino acid on A, and [cB-DB] is bound to any amino acid on B.		

□ US10071086

1H-pyrazolo[3,4-b]pyridines and therapeutic uses thereof			
문헌번호 (문헌일)	US10071086 (2018-09-11)	출원번호 (출원일)	15/420398 (2017-01-31)
출원인	SAMUMED (US)	기술분류	야누스 키나아제/화합물
요약	Provided herein are compounds according to Formulas (I) or (II) and pharmaceutically acceptable salts thereof, and compositions comprising the same, for use in various methods, including treating cancer, abnormal cellular proliferation, angiogenesis, Alzheimer's disease, lung disease, osteoarthritis, idiopathic pulmonary fibrosis and neurological conditions/disorders/diseases. [Image]		

대표청구항	1. A method of inhibiting one or more proteins in the Wnt pathway, the method comprising contacting a cell with an effective amount of a compound of Formula I, or a pharmaceutically acceptable salt thereof: [Image]wherein:R1 is H;R2 is independently selected from the group consisting of H and —(C1-9 alkyl)nN(R9)2;R3 is H;R4 is independently selected from the group consisting of -aryl(R13)q, -furyl(R15)q, and -thiophenyl(R15)q;R5 is H;each R8 is a substituent attached to the heterocyclyl ring and independently selected from the group consisting of H, halide, and —C1-4 alkyl;each R9 is independently selected from the group consisting of H, —C1-9 alkyl, —(C1-3 alkyl)ncarbocyclyl and —(C1-9 alkyl)N(R16)2;each R13 is 1-2 substituents each attached to the aryl ring and independently selected from the group consisting of H, halide, —(C1-3 alkyl)nheterocyclyl(R8)q, —(C1-9 alkyl)nN(R9)2 and —(C1-9 alkyl)nNHSO2R18;each R15 is a substituent attached to the heteroaryl ring and independently selected from the group consisting of H, lower alkyl, halide, —CF3, CN, and —C(═O)(C1-3 alkyl);each R16 is independently selected from the group consisting of H and lower alkyl;each R18 is a lower alkyl;A is C;each q is independently an integer of 1 or 2; andeach n is independently an integer of 0 or 1.

4-2 항체

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	US7947653	13/018115	2011-01-31	Methods for treating epidermal growth factor receptor tyrosine kinase inhibitor-resistant cancers	COLD SPRING HARBOR LABORATORY
2	US8440192	13/352736	2012-01-18	Bispecific binding agents for modulating biological activity	MERRIMACK PHARMACEUTICALS
3	US9289491	14/624334	2015-02-17	Method and composition for hyperthermally treating cells	GHOLAM A. PEYMAN

□ US7947653

Methods for treating epidermal growth factor receptor tyrosine kinase inhibitor-resistant cancers			
문헌번호 (문헌일)	US7947653 (2011-05-24)	출원번호 (출원일)	13/018115 (2011-01-31)
출원인	COLD SPRING HARBOR LABORATORY (US)	기술분류	인터루킨/항체
요약	Cancer treatment with a combination of an Epidermal Growth Factor Receptor tyrosine kinase inhibitor and an Interleukin-6 inhibitor.		
대표청구항	1. A method of treating an Epidermal Growth Factor Receptor tyrosine kinase inhibitor-resistant cancer in a subject with a combination drug therapy, the method comprising: administering to a subject with an Epidermal Growth Factor Receptor tyrosine kinase inhibitor-resistant cancer a combination comprising an Epidermal Growth Factor Receptor tyrosine kinase inhibitor and an Interleukin-6 inhibitor, wherein:(a) the Epidermal Growth Factor Receptor tyrosine kinase inhibitor is erlotinib or gefitinib;(b) the Interleukin-6 inhibitor is an anti-Interleukin-6 antibody or an anti-Interleukin-6 receptor antibody;(c) the Epidermal Growth Factor Receptor tyrosine kinase inhibitor and the Interleukin-6 inhibitor are each administered in an amount that is therapeutically effective when the two are administered as a combination drug therapy; and(d) wherein the Epidermal Growth Factor Receptor tyrosine kinase inhibitor-resistant cancer is a Non Small Cell Lung Carcinoma, breast cancer, or pancreatic cancer.		

□ US8440192

Bispecific binding agents for modulating biological activity			
문헌번호 (문헌일)	US8440192 (2013-05-14)	출원번호 (출원일)	13/352736 (2012-01-18)
출원인	MERRIMACK PHARMACEUTICALS (US)	기술분류	인터루킨/항체
요약	Methods for improving the biological and pharmaceutical properties of bispecific binding agents are described herein where the bispecific binding agents are able to target cells by a high affinity binding domain to a first cell surface marker that does not induce a significant biological effect and a low affinity binding domain that binds specifically to a second cell surface marker, causing a significant and desired biological effect. Compositions of such bispecific binding agents, uses for them, and kits containing them are also provided.		
대표청구항	1. A bispecific binding agent capable of modulating biological activity of target cells that have a first and a second target antigen on their exterior surface, wherein: (i) said first and second target antigens do not share a common ligand;(ii) said second target antigen is a growth factor receptor or a cytokine receptor; and,(iii) said bispecific binding agent has a first binding domain that is an antibody that binds to the first target antigen with a dissociation constant (Kd) for the first target antigen of 10-7 M or less, and a second binding domain that is an antibody that binds to the second target antigen with a Kd for the second target antigen that is at least 10 times greater than the Kd of the first binding domain for the first target antigen; and,when the first target antigen of said first binding domain is ErbB2 (HER2), the second target antigen for said second binding domain is not ErbB3 (HER3); and,wherein said binding of said first antigen to said first binding domain does not modulate biological activity of said first target antigen, but said binding of said second binding domain to said second target antigen modulates biological activity of said second target antigen, and the modulation of the biological activity of the second target antigen results in either an inhibition of target cell proliferation or death of the target cell.		

□ US9289491

Method and composition for hyperthermally treating cells			
문헌번호 (문헌일)	US9289491 (2016-03-22)	출원번호 (출원일)	14/624334 (2015-02-17)
출원인	GHOLAM A. PEYMAN (US)	기술분류	사이토카인 폭풍/항체
요약	A method and composition for hyperthermally treating tumor cells in a patient under conditions that affect tumor stem cells and tumor cells.		
대표청구항	1. A method of providing therapy, the method comprising administering to a patient in need thereof a plurality of nanoparticles, the nanoparticles coated or otherwise associated with an antibody to specific cells, under conditions sufficient to permit antibody accumulation at a tissue target site,radiating the target site with an energy source to penetrate into the tissue target site to controllably heat the nanoparticles and generate thermal energy to induce a photoacoustic signal or sound wave from the nanoparticles,using a processor to control the amount of thermal energy delivered at the desired temperature to the target site,recording the temperature and photoacoustic signal or sound wave from the target site or from one or more multiple locations, andamplifying and processing the recorded photoacoustic signal or sound waves to generate a computational tomographic image of the nanoparticles at the tissue target site.		

4-3 천연물

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	KR10-1257494	10-2010-0049866	2010-05-27	전복 소화 가수분해물을 함유하는 면역계 염증성 질환 예방 및 치료용 조성물	조선대학교
2	KR10-1172595	10-2010-0049925	2010-05-28	꽈리 추출물을 유효성분으로 함유하는 염증성 질환의 예방 및 치료용 조성물	김형일
3	KR10-1269590	10-2010-0140066	2010-12-31	애기땅빈대 추출물을 유효성분으로 포함하는 염증 질환 또는 알러지 질환의 예방 또는 치료용 조성물	한국생명공학연구원
4	KR10-1057007	10-2011-0007913	2011-01-26	꽈배기모자반(Sargassum siliquastrum) 추출물을 포함하는 염증성 질환의 예방 및 치료용 약학적 조성물	한국해양연구원
5	KR10-1416149	10-2011-0036947	2011-04-20	IL-6 유도 STAT3 활성화 저해 효과를 갖는 강황 또는 울금의 지상부 추출물, 또는 이의 비극성 유기용매 분획물을 포함하는 조성물	한국생명공학연구원
6	KR10-1298243	10-2011-0072011	2011-07-20	낙석등 및 목단피의 추출 혼합물을 유효성분으로 포함하는 염증성 질환 예방 또는 치료용 약제학적 조성물 및 상기 조성물의 제조방법	신일제약
7	KR10-1627630	10-2011-0130073	2011-12-07	류마티스 관절염 치료용 조성물	가톨릭대학교
8	KR10-1373653	10-2012-0012066	2012-02-07	해당화 추출물을 포함하는 전립선 비대증 예방 및 치료를 위한 조성물	제넨헬스케어
9	KR10-1373173	10-2012-0050732	2012-05-14	복합생약 추출물을 함유하는 염증질환 또는 알레르기 질환의 치료 및 예방용 조성물	한국한방산업진흥원
10	KR10-1448355	10-2012-0111747	2012-10-09	등심초 추출물을 함유하는 염증 질환 또는 알레르기 질환의 치료 및 예방용 조성물	한국한방산업진흥원
11	KR10-1424125	10-2012-0126880	2012-11-09	갈색거저리 유충을 포함하는 염증성 질환 치료용 조성물	대한민국

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
12	KR10-1577792	10-2013-0120105	2013-10-08	마치현 추출물 또는 이의 분획물을 유효성분으로 포함하는 ＩＬ-6 매개성 질환의 예방 또는 치료용 약학적 조성물	한국생명공학연구원
13	KR10-1620153	10-2014-0000937	2014-01-03	갯방풍 추출물을 유효성분으로 포함하는 관절염 예방 또는 치료용 조성물	가톨릭대학교
14	KR10-1715274	10-2014-0082952	2014-07-03	감국 추출물 또는 분획물을 유효성분으로 포함하는 염증 질환 예방, 개선 또는 치료용 조성물	원광대학교
15	KR10-1758338	10-2014-0098375	2014-07-31	알로에 꽃 추출물을 유효성분으로 함유하는 항산화, 항염증 또는 면역조절 활성을 갖는 조성물	건국대학교
16	KR10-1784672	10-2015-0165206	2015-11-25	미생물(담자균류균사) 발효하거나, 추가로 효소처리를 통해 생물전환된 느릅나무 발효물을 포함하는 항알레르기능이 있는 치료용 약학조성물 또는 식품조성물	에스티알바이오텍
17	KR10-1966294	10-2017-0050809	2017-04-20	감태 추출물과 괭생이모자반 추출물을 이용한 항염증용 조성물	전남대학교
18	KR10-1816742	10-2017-0051827	2017-04-21	감태 추출물과 괭생이모자반 추출물을 이용한 항알레르기 조성물	전남대학교

□ KR10-1257494

전복 소화 가수분해물을 함유하는 면역계 염증성 질환 예방 및 치료용 조성물			
문헌번호 (문헌일)	KR10-1257494 (2013-04-17)	출원번호 (출원일)	10-2010-0049866 (2010-05-27)
출원인	조선대학교 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 전복 육과 내장의 위 소장 소화 가수분해물을 유효성분으로 함유하는 면역계 염증성 질환에 대한 예방 및 치료용 약제학적 조성물 및 상기 질환을 개선시킬 수 있는 건강기능식품 조성물에 관한 것으로, 본 발명에 따른 전복 소화 가수분해물은 염증반응 지표물질인 대식세포 내 NO 생성을 억제하며, 주요 면역조절인자들인 iNOS (inducible nitric oxide synthase), COX-2 (cyclooxygenase-2), IL-1beta, TNF-alpha, IL-6에 대한 발현을 유의적으로 억제하며, 주요 염증 관련 인자들의 발현에 관여하는 핵 전사인자인 NF-κB의 핵 내로의 전이 및 활성을 억제함으로써 뛰어난 면역활성 효능을 나타내는 효과가 있다.		
대표청구항	전복을 위장 조건하에서 1차 가수분해시키고 이어서 소장 조건하에서 2차 가수분해시켜서 얻는 분자량 10 ~ 5kDa 크기의 전복 소화 가수분해물을 유효성분으로 함유하는 면역계 대식세포의 염증성 질환 예방 및 치료용 약제학적 조성물.		

□ KR10-1172595

꽈리 추출물을 유효성분으로 함유하는 염증성 질환의 예방 및 치료용 조성물			
문헌번호 (문헌일)	KR10-1172595 (2012-08-02)	출원번호 (출원일)	10-2010-0049925 (2010-05-28)
출원인	김형일 (KR)	기술분류	종양괴사인자/천연물
요약	본 발명은 꽈리(Physalisalkekengivar. francheti(Masters) Hort) 추출물을 유효성분으로 함유하는 조성물에 관한 것으로, 상세하게는 본 발명의 꽈리 추출물이 리포폴리싸카가이드(LPS) 처리 후 면역 반응에 의한 인터루킨((interleukin)-1β, IL-1β), 종양괴사인자((tumor necrosis factor)-α, TNF-α), 코르티코스테론(corticosterone), COX-2, NO의 생성을 효과적으로 억제함을 확인함으로서, 상기 조성물은 염증성 질환의 예방 및 치료용 약학조성물 및 건강기능식품의 제공으로 유용하게 이용할 수 있다.		
대표청구항	한국산 꽈리(Physalis alkekengi var. francheti (Masters) Hort) 과실을 세척 후, 음건하여 추출 5시간 내지 25시간 전에 건조된 꽈리 건조중량의 5 내지 15배에 달하는 부피의 물로, 50℃ 내지 150℃에서 30분 내지 10시간 동안 열수 추출법을 수행하여 감압여과, 농축 및 동결 건조하여 수득한 한국산 꽈리 과실 물 추출물을 유효성분으로 함유하는 염증성 고열, 또는 편도염의 예방 및 치료용 약학조성물.		

□ KR10-1269590

애기땅빈대 추출물을 유효성분으로 포함하는 염증 질환 또는 알러지 질환의 예방 또는 치료용 조성물			
문헌번호 (문헌일)	KR10-1269590 (2013-05-24)	출원번호 (출원일)	10-2010-0140066 (2010-12-31)
출원인	한국생명공학연구원 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 애기땅빈대(Euphorbiasupina) 추출물을 유효성분으로 포함하는 염증 질환 또는 알러지 질환의 예방 또는 치료용 조성물, 상기 조성물을 유효 성분으로 포함하는 약학적 조성물에 관한 것이다. 또한, 본 발명은 애기땅빈대 추출물을 유효성분으로 포함하는 염증 질환 또는 알러지 질환의 예방 또는 개선용 식품 조성물, 의약외품 조성물 및 염증 질환 또는 알러지 질환의 예방 또는 치료방법에 관한 것이다. 본 발명에 따른 조성물은 항염증 활성을 가지므로 염증질환의 예방 또는 치료에 유용하게 사용할 수 있으며, 이 외에도 의약품, 의약외품 및 식품 등 다양한 용도로 이용될 수 있다.		
대표청구항	애기땅빈대(Euphorbia supina) 추출물을 유효성분으로 포함하는 알러지 질환의 예방 또는 치료용 약학적 조성물.		

□ KR10-1057007

꽈배기모자반(Sargassum siliquastrum) 추출물을 포함하는 염증성 질환의 예방 및 치료용 약학적 조성물			
문헌번호 (문헌일)	KR10-1057007 (2011-08-09)	출원번호 (출원일)	10-2011-0007913 (2011-01-26)
출원인	한국해양연구원 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 꽈배기모자반(Sargassumsiliquastrum) 추출물을 유효성분으로 포함하는 염증성 질환의 예방, 치료 및 개선용 조성물에 대한 것이다. 또한 본 발명은 사가크로마놀 G(sargachromanol G)를 유효성분으로 포함하는 염증성 질환의 예방, 치료 및 개선용 조성물에 대한 것이다. 상기 사가크로마놀 G는 꽈배기모자반 등과 같은 천연물로부터 유래할 수 있으며, 합성할 수도 있다.		
대표청구항	꽈배기모자반(Sargassum siliquastrum) 추출물을 유효성분으로 포함하는 염증성 질환의 예방 및 치료용 약학적 조성물로, 상기 꽈배기모자반 추출물은 하기 화학식 1로 표시되는 사가크로마놀 G(sargachromanol G)를 포함하며, 질소 산화물 및 PGE2의 생성을 저해하는 약학적 조성물:<화학식 1>[이미지].		

□ KR10-1416149

ＩＬ-６ 유도 ＳＴＡＴ３ 활성화 저해 효과를 갖는 강황 또는 울금의 지상부 추출물, 또는 이의 비극성 유기용매 분획물을 포함하는 조성물			
문헌번호 (문헌일)	KR10-1416149 (2014-07-01)	출원번호 (출원일)	10-2011-0036947 (2011-04-20)
출원인	한국생명공학연구원 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 강황(Curcuma longa L) 또는 울금(Curcuma aromatica L)의 지상부 추출물, 또는 이의 비극성 유기용매 분획물을 유효성분으로 포함하는 IL-6 유도 STAT3 매개 질환의 예방 또는 치료용 약학적 조성물에 관한 것이다. 구체적으로, 본 발명은 강황 또는 울금 지상부 추출물, 또는 이의 비극성 유기용매 분획물을 유효성분으로 포함하는 IL-6 유도 STAT3 매개 질환의 예방 또는 치료용 약학적 조성물, 상기 약학적 조성물을 유효성분으로 포함하는 IL-6 유도 STAT3 매개 질환의 예방 또는 개선용 기능성 식품 및 상기 약학적 조성물을 치료를 필요로 하는 개체에 투여하는 단계를 포함하는, 인간을 제외한 동물의 IL-6 유도 STAT3 매개 질환을 치료하는 방법에 관한 것이다. 본 발명에 따른 강황 또는 울금의 지상부 추출물, 이의 비극성 유기용매 분획물은 IL-6 유도 STAT3 활성화를 효과적으로 저해하므로, IL-6 유도 STAT3 매개 질환, 예컨대 암 또는 염증성 질환 등의 예방 및 치료에 효과적으로 사용될 수 있다.		
대표청구항	강황 줄기 또는 울금 지상부의 추출물, 또는 이의 에틸아세테이트 분획물을 유효성분으로 포함하며 상기 추출물은 C1 ~ C4 저급 알코올 중 어느 하나의 저급 알코올을 이용하여 추출한 것인, 암 및 염증성 질환으로 이루어진 군으로부터 선택되는 IL-6 유도 STAT3 매개 질환의 예방 또는 치료용 약학적 조성물.		

□ KR10-1298243

낙석등 및 목단피의 추출 혼합물을 유효성분으로 포함하는 염증성 질환 예방 또는 치료용 약제학적 조성물 및 상기 조성물의 제조방법			
문헌번호 (문헌일)	KR10-1298243 (2013-08-13)	출원번호 (출원일)	10-2011-0072011 (2011-07-20)
출원인	신일제약 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 낙석등(TrachelospermiCaulis) 추출물 및 목단피(Paeonia Suffruticosa Andrews) 추출물을 유효성분으로 포함하는 염증성 질환 예방 또는 치료용 약제학적 조성물, 의약외품 조성물, 염증의 예방 또는 개선용 건강기능식품 조성물, 화장료 조성물, 상기 약제학적 조성물의 제조방법 및 상기 조성물을 염증성 질환 의심 개체에 투여하는 단계를 포함하는 인간을 제외한 동물의 염증성 질환 치료 방법에 관한 것이다. 본 발명에 따른 조성물은 기존의 낙석등 및 목단피 각각의 추출물과 비교하여 항염증 및 부종 억제 효과가 뛰어난 염증성 질환의 예방, 치료 또는 개선용으로 사용할 수 있고, 천연물 치료제로서 합성 의약품에 비하여 진균감염 및 기타 부작용의 염려가 없는 안전한 치료제를 제공할 수 있으며, 낙석등 및 목단피 추출물의 기존의 항세균, 뼈 보강, 쟁혈, 소염, 대사, 보혈, 원기활성 등의 기능과 작용에 의하여 치료효과의 상승작용을 가져올 수 있다.		
대표청구항	낙석등(Trachelospermi Caulis) 추출물 및 목단피(Paeonia Suffruticosa Andrews) 추출물을 유효성분으로 포함하는, 관절염의 예방 또는 치료용 약제학적 조성물.		

□ KR10-1627630

류마티스 관절염 치료용 조성물			
문헌번호 (문헌일)	KR10-1627630 (2016-05-31)	출원번호 (출원일)	10-2011-0130073 (2011-12-07)
출원인	가톨릭대학교 (KR)	기술분류	종양괴사인자/천연물
요약	본 발명은 광천수를 유효성분으로 함유하는 류마티스 관절염 치료용 조성물에 관한 것으로서, 본 발명에 따른 광천수는 미네랄 성분으로서, 칼륨 200~230㎎/L, 나트륨 7000~9500㎎/L, 칼슘 1400~1700㎎/L, 마그네슘 900~1100㎎/L, 아연 3~9㎎/L, 스트론튬 25~35㎎/L, 셀레늄 200~500㎍/L, 바나듐 65~75㎍/L, 게르마늄 0.5~1.5㎍/L, 망간 10~40㎍/L, 코발트 1~3㎍/L, 티탄 600~950㎍/L, 구리 3~9㎍/L, 리튬 0.02~0.09㎎/L, 염소이온 16000~19500㎎/L, 불소이온 1.5~3.0㎎/L, 브롬이온 40~56㎎/L, 황산이온 3000~4500㎎/L, 보론 0.8~1.2㎎/L 및 이산화규소 0.5~15㎎/L이 포함된 미네랄 워터로서 류마티스 관절염을 일으킨다고 알려진 염증성 사이토카인의 발현을 억제하며, in vivo 실험에서도 류마티스 관절염으로 인한 세포 파괴를 억제시켜 류마티스 관절염 치료 효과를 가지고 있다. 따라서 본 발명은 류마티스 관절염의 치료 및 예방에 유용한 약학적 용도로 사용할 수 있으며, 나아가 이를 개선할 수 있는 기능성 식품의 용도로도 사용할 수 있다.		
대표청구항	미네랄 성분으로서 칼륨 200~230㎎/L, 나트륨 7000~9500㎎/L, 칼슘 1400~1700㎎/L, 마그네슘 900~1100㎎/L, 아연 3~9㎎/L, 스트론튬 25~35㎎/L, 셀레늄 200~500㎍/L, 바나듐 65~75㎍/L, 게르마늄 0.5~1.5㎍/L, 망간 10~40㎍/L, 코발트 1~3㎍/L, 티탄 600~950㎍/L, 구리 3~9㎍/L, 리튬 0.02~0.09㎎/L, 염소이온 16000~19500㎎/L, 불소이온 1.5~3.0㎎/L, 브롬이온 40~56㎎/L, 황산이온 3000~4500㎎/L, 보론 0.8~1.2㎎/L 및 이산화규소 0.5~15㎎/L를 포함하는 대한민국 강원도 강릉시 옥계면 금진3리 92-1번지 해안단구 지역 온천지의 지하 1100m 지점에서 취수한 해양성 광천수를 함유하고,전염증성 사이토카인 TNF-α, IL-6, IL-1β 및 IL-10의 생산 감소와 더불어 파골세포 분화 억제 기작을 통해 류마티스 관절염 치료 효과를 갖는 것을 특징으로 하는, 류마티스 관절염 치료용 조성물.		

□ KR10-1373653

해당화 추출물을 포함하는 전립선 비대증 예방 및 치료를 위한 조성물			
문헌번호 (문헌일)	KR10-1373653 (2014-03-06)	출원번호 (출원일)	10-2012-0012066 (2012-02-07)
출원인	제넨헬스케어 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 해당화 추출물을 포함하는 전립선 비대증 예방 및 치료를 위한 조성물에 관한 것으로서, 본 발명의 해당화 추출물은 인체 전립선암 세포주 세포독성이 높은 세포 생존률, 전립선비대가 유발된 12주령의 SD 래트 간으로부터 추출된 5-알파(alpha)-리덕타제(reductase) 1형 및 2형에 대한 저해능, 5RD 2형 과발현 전립선 세포주에서의 5RD 활성 억제효과 및 PSA의 mRNA 발현 억제효과, 및 COX-2, iNOS,		

	IL-6, IL-1beta 등의 염증시그널의 감소효과를 나타내므로 전립선 비대증 예방 및 치료를 위한 약학조성물 및 건강기능식품에 유용하게 이용될 수 있다.
대표청구항	해당화 줄기 재료를 동결 건조하여 마쇄한 후 시료 중량의 2 내지 20배에 달하는 부피의 1: 1-10 혼합비의 물 및 주정 혼합용매로 30 내지 80℃에서 2 내지 12시간 동안에서 열수 추출하여 추출한 후 감압여과 및 농축하여 수득되는 해당화 줄기 추출물을 유효성분으로 함유하는 전립선 비대증의 예방 및 치료를 위한 약학조성물.

□ KR10-1373173

복합생약 추출물을 함유하는 염증질환 또는 알레르기 질환의 치료 및 예방용 조성물			
문헌번호 (문헌일)	KR10-1373173 (2014-03-05)	출원번호 (출원일)	10-2012-0050732 (2012-05-14)
출원인	한국한방산업진흥원 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 선복화, 해백, 전호 및 괄루인으로 구성된 복합생약 추출물을 유효성분으로 함유하는 염증질환 또는 알레르기 질환의 예방 및 치료를 위한 조성물에 관한 것으로, 본 발명의 추출물은 골수유래 비만세포 (BMMC)에서 COX-2 의존적인 PGD2 생성 및 류코트리엔 C4 (LTC4)생성을 억제하며, LPS 자극 후 대식세포에서 분비되는 NO 및 사이토카인 (TNF-α, IL-1, IL-6) 생성 억제 그리고 오브알부민에 의해 유도된 천식 동물모델에서 혈청 IgE 농도 감소 및 기관지 폐포세척액의 IL-4, IL-5, IL-10, 및 IL-17의 생산을 억제하는 항염증, 항알레르기 및 항천식 효과를 확인함으로써, 염증질환 또는 알레르기 질환의 예방 및 치료용 약학조성물에 이용될 수 있다.		
대표청구항	선복화, 해백, 전호 및 괄루인으로 구성된 복합생약 추출물을 유효성분으로 함유하는 염증 질환 또는 알러지 질환의 예방 및 치료용 약학조성물.		

□ KR10-1448355

등심초 추출물을 함유하는 염증 질환 또는 알레르기 질환의 치료 및 예방용 조성물			
문헌번호 (문헌일)	KR10-1448355 (2014-09-30)	출원번호 (출원일)	10-2012-0111747 (2012-10-09)
출원인	한국한방산업진흥원 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 등심초 추출물을 유효성분으로 함유하는 염증질환 또는 알레르기 질환의 예방 및 치료를 위한 조성물에 관한 것으로, 본 발명의 추출물은 LPS 자극 후 대식세포에서 분비되는 NO 및 사이토카인 (IL-1, IL-6)생성, 비만세포에서 분비되는 β-HEX, COX-2 의존적인 PGD2, LTC4 생성을 억제하는 항염증 효과를 확인함으로써, 염증질환 또는 알레르기 질환의 예방 및 치료용 약학조성물에 이용될 수 있다.		
대표청구항	원재료인 건조 상태의 등심초(Juncus effusus L. var. decipiens Buchen.)에 추출용매로서 50 내지 90% 에탄올 혼합용매를 건조된 상기 원재료 중량의 2 내지 4배를 가하여, 20 내지 90℃에서 18 내지 25시간 동안 냉침 추출법으로 추출한 후 여과하고 감압 농축하여 수득되는, 등심초의 50 내지 90% 에탄올 혼합용매에 가용한 추출물을 유효성분으로 함유하는 비염의 예방 및 치료용 약학조성물.		

□ KR10-1424125

갈색거저리 유충을 포함하는 염증성 질환 치료용 조성물			
문헌번호 (문헌일)	KR10-1424125 (2014-07-22)	출원번호 (출원일)	10-2012-0126880 (2012-11-09)
출원인	대한민국 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 갈색거저리(Tenebrio molitor) 유충을 포함하는 염증성 질환 치료용 조성물에 관한 것으로, 갈색거저리 유충을 유효성분으로 포함하는 염증성 질환 예방 또는 치료용 약학적 조성물, 염증성 질환 예방 또는 개선용 식품 조성물 및 사료용 조성물에 관한 것이다. 본 발명에 따른 갈색거저리 유충은 염증 관련 인자들인 NO, iNOS, TNF-α, IL-6, IL-1ß, NF-κB 의 발현을 억제하여 항염증활성을 보이고, 대식세포에 대한 독성이 없으므로, 염증성 질환의 예방 또는 치료용 약학적 조성물, 염증성 질환의 예방 또는 개선용 식품 조성물 또는 사료용 조성물의 제조에 이용할 수 있다.		
대표청구항	갈색거저리 유충을 유효성분으로 포함하는 염증성 질환 예방 또는 치료용 약학적 조성물.		

□ KR10-1577792

마치현 추출물 또는 이의 분획물을 유효성분으로 포함하는 IL-6 매개성 질환의 예방 또는 치료용 약학적 조성물			
문헌번호 (문헌일)	KR10-1577792 (2015-12-09)	출원번호 (출원일)	10-2013-0120105 (2013-10-08)
출원인	한국생명공학연구원 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 마치현(Portulacaoleracea L.) 추출물 또는 이의 분획물을 유효성분으로 포함하는, IL-6(interleukin-6) 매개성 질환의 예방 또는 치료용 약학적 조성물 및 상기 조성물을 IL-6 매개성 질환 의심 개체에 투여하는 단계를 포함하는, IL-6 매개성 질환의 치료 방법에 관한 것이다. 또한, 본 발명은 마치현 추출물 또는 이의 분획물을 유효성분으로 포함하는, IL-6 매개성 질환의 예방 또는 개선용 식품 조성물 및 의약외품 조성물에 관한 것이다.		
대표청구항	마치현(Portulaca oleracea L.) 에탄올 추출물의 헥산 또는 에틸아세테이트 분획물을 유효성분으로 포함하는, 골 대사성 질환, 염증성 장질환, 크론병 및 이들의 조합으로 구성되는 군으로부터 선택된 IL-6(interleukin-6) 매개성 질환의 예방 또는 치료용 약학적 조성물.		

□ KR10-1620153

갯방풍 추출물을 유효성분으로 포함하는 관절염 예방 또는 치료용 조성물			
문헌번호 (문헌일)	KR10-1620153 (2016-05-03)	출원번호 (출원일)	10-2014-0000937 (2014-01-03)
출원인	가톨릭대학교 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 갯방풍 추출물을 유효성분으로 포함하는 관절염 또는 골다공증의 예방 또는 치료를 목적으로 한 약학 조성물에 관한 것이다. 본 발명에 따른 갯방풍 추출물은 염증성 사이토카인 IL-17, IL-6 또는 TNF-의 활성을 감소 또는 억제시키는 활성이		

	우수하고, 파골세포 분화를 감소시키는 효과가 우수하여 관절염 또는 골다공증의 예방 또는 치료할 수 있는 조성물로 유용하게 사용할 수 있다.또한, 세포독성이 일어나지 않으며, 약물에 대한 독성 및 부작용도 없어 장기간 복용 시에도 안심하고 사용할 수 있으며, 체내에서도 안정한 효과가 있다.
대표청구항	갯방풍 메탄올 추출물(Glehnia littoralis) 및 코엔자임 Q10을 유효성분으로 포함하는 관절염 예방 또는 치료용 약학적 조성물로서, 상기 갯방풍 메탄올 추출물은 200 ~ 300 ug/ml의 농도로 포함하고 코엔자임 Q10은 3 ~ 6 uM의 농도로 포함하는 것을 특징으로 하는 관절염 예방 또는 치료용 약학적 조성물.

□ KR10-1715274

감국 추출물 또는 분획물을 유효성분으로 포함하는 염증 질환 예방, 개선 또는 치료용 조성물			
문헌번호 (문헌일)	KR10-1715274 (2017-03-06)	출원번호 (출원일)	10-2014-0082952 (2014-07-03)
출원인	원광대학교 (KR)	기술분류	종양괴사인자/천연물
요약	본 발명은 감국 추출물 또는 분획물을 유효성분으로 포함하는 염증 질환 예방, 개선 또는 치료용 조성물에 관한 것으로, 보다 상세하게는 사이클로옥시게나아제(COX-2), 종양괴사인자(TNF-α), 미엘퍼옥시다아제(MPO) 등의 농도를 감소시키고, 일산화질소, 일산화질소 합성효소(iNOS)의 발현양을 감소시킬 수 있으며, 핵인자-kB(NF-kB) 활성 억제를 통해 우수한 항염증 활성을 가지는 감국 추출물 또는 분획물을 유효성분으로 포함하는 염증 질환 예방, 개선 또는 치료용 조성물에 관한 것이다.		
대표청구항	감국 70%(v/v) 에탄올 추출물을 디클로로메탄, 에틸아세테이트 및 물을 이용하여 순차적으로 분획하여 얻어진 에틸아세테이트 분획물을 유효성분으로 포함하는 염증 질환의 예방 또는 치료용 약학 조성물.		

□ KR10-1758338

알로에 꽃 추출물을 유효성분으로 함유하는 항산화, 항염증 또는 면역조절 활성을 갖는 조성물			
문헌번호 (문헌일)	KR10-1758338 (2017-07-10)	출원번호 (출원일)	10-2014-0098375 (2014-07-31)
출원인	건국대학교 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 알로에 꽃 추출물을 유효성분으로 함유하는 항산화, 항염증 또는 면역조절 활성을 갖는 조성물에 관한 것이다. 상기와 같은 본 발명에 따르면, 알로에 꽃 추출물을 유효성분으로 함유함으로써, 활성산소종(ROS, reactive oxygen species)을 소거하고 일산화질소(NO, nitric oxide, NO) 생성 및 유도형 일산화질소 합성효소(iNOS, inducible nitric oxide synthetase)와 시클로옥시게나아제-2(COX-2, cyclooxygenase) 활성을 억제하여 항산화, 항염증 또는 면역조절 활성을 갖는 약제학적 조성물, 식품 조성물, 화장료 조성물 및 비누 조성물을 제공하는 효과가 있다.		
대표청구항	활성산소종(ROS, reactive oxygen species)을 소거하고 알로에 꽃 추출물 1 내지 4mg/mL를 유효성분으로 함유하며, 피부염, 아토피, 간염, 당뇨병, 피부경화증, 퇴행성 신경질환, 죽상동맥경화증 및 허혈로 이루어진 군에서 선택되는 하나 이상의 질환을 예방 또는 치료하는 활성산소 억제용 조성물.		

□ KR10-1784672

미생물(담자균류균사) 발효하거나, 추가로 효소처리를 통해 생물전환된 느릅나무 발효물을 포함하는 항알레르기능이 있는 치료용 약학조성물 또는 식품조성물			
문헌번호 (문헌일)	KR10-1784672 (2017-09-28)	출원번호 (출원일)	10-2015-0165206 (2015-11-25)
출원인	에스티알바이오텍 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 미생물(담자균류균사) 발효하거나, 추가로 효소처리를 통해 생물전환된 느릅나무 발효물을 포함하는 항알레르기능이 있는 치료용 약학조성물 또는 식품조성물 등에 관한 것으로, 담자균류균사 발효 및 효소처리를 통해 생물전환된 느릅나무 발효물은 발효되지 않은 느릅나무에 비하여 항알레르기 물질을 많이 함유하고 있으므로, 이를 이용하여 식품 등으로 개발시 알레르기 발생을 저감시킬 수 있는 효과를 발휘한다.		
대표청구항	(a) 느릅나무를 분말화한 느릅나무분말을 가수분해효소로 처리한 후 멸균하여 액상느릅나무배지로 제조하는 단계;(b) 상기 (a)단계의 배양배지화 한 액상느릅나무배지에 담자균류균사를 접종하여 배양발효하는 생물전환 발효공정을 수행하는 단계; 및(c) 상기 (b)단계의 생물전환 발효공정에 의해 생산된 발효물로부터 섬유소분해효소 처리 공정을 통해 항알레르기 효능을 향상시킨 발효 및 효소처리의 생물전환산물을 생산하는 단계를 포함하는, 항알레르기 효능이 증가된 발효물의 제조방법으로써,상기 (a) 단계에서의 가수분해효소는 세포벽 구성성분을 분해할 수 있는 섬유소분해효소 및 아밀라아제인 것이고,상기 (b) 단계에서의 담자균류균사는 상황버섯, 차가버섯, 표고버섯, 잎새버섯, 목이버섯, 눈꽃송이버섯 및 치마버섯으로 이루어진 그룹에서 선택되는 것이며,상기 (c) 단계에서의 섬유소분해효소는 셀룰라아제, 헤미-셀룰라아제, 펙티나아제 및 글루카나아제로 이루어진 그룹으로부터 선택되는 것인, 항알레르기 효능이 증가된 발효물의 제조방법.		

□ KR10-1966294

감태 추출물과 괭생이모자반 추출물을 이용한 항염증용 조성물			
문헌번호 (문헌일)	KR10-1966294 (2019-04-01)	출원번호 (출원일)	10-2017-0050809 (2017-04-20)
출원인	전남대학교 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 LPS(lipopolysaccharide)로 자극된 마우스 대식세포주(RAW 264.7 cells)에서 NO 생성을 억제하고, 염증성 사이토카인(IL-1β, IL-6 및 TNF-α)의 분비를 억제하는 감태 추출물과 괭생이모자반 추출물을 이용한 항염증용 조성물을 개시한다.		
대표청구항	감태 추출물와 괭생이모자반 추출물의 혼합물을 유효성분으로 포함하되,상기 혼합물은 감태 추출물과 괭생이모자반 추출물의 6:4 내지 8:2 중량비의 혼합물인 것을 특징으로 하는항염증용 조성물.		

□ KR10-1816742

감태 추출물과 괭생이모자반 추출물을 이용한 항알레르기 조성물			
문헌번호 (문헌일)	KR10-1816742 (2018-01-03)	출원번호 (출원일)	10-2017-0051827 (2017-04-21)
출원인	전남대학교 (KR)	기술분류	인터루킨/천연물
요약	본 발명은 IgE(anti-DNP-IgE) 및 항원(DNP-BSA)으로 활성화된 마우스 골수 유래 비만세포주 BMCMCs의 탈과립을 억제하고 또 IL-1β, IL-4, IL-5, IL-6, TNF-α 등의 염증성 사이토카인 생성을 억제하며 이들 사이토카인의 대표적인 전사 인자인 NF-κB의 활성화를 억제하는 감태 추출물과 괭생이모자반 추출물을 이용한 항알레르기 조성물을 개시한다.		
대표청구항	감태 추출물과 괭생이모자반 추출물의 혼합물을 유효성분으로 포함하되,상기 추출물은 물과 에탄올의 혼합용매 추출물이고,상기 혼합물은 감태 추출물과 괭생이모자반 추출물의 5:5 중량비의 혼합물인 것을 특징으로 하는항알레르기 조성물.		

4-4 단백질

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	EP2368564	2010-002990	2010-03-22	Pharmaceutical composition containing SAA for use in the treatment of acute and chronic dysregulated inflammatory diseases or conditions	LINKE, REINHOLD PAUL
2	US8916525	13/635868	2011-03-18	TNF-A and TWEAK dual antagonist for the prophylaxis and treatment of autoimmune diseases	한국생명공학연구원
3	US9782454	13/642757	2011-04-22	Highly active polypeptides and methods of making and using the same	LONGEVITY BIOTECH
4	US9409986	14/133380	2013-12-18	IL-1 binding proteins	ABBVIE

□ EP2368564

Pharmaceutical composition containing SAA for use in the treatment of acute and chronic dysregulated inflammatory diseases or conditions			
문헌번호 (문헌일)	EP2368564 (2015-09-02)	출원번호 (출원일)	2010-002990 (2010-03-22)
출원인	LINKE, REINHOLD PAUL (DE)	기술분류	MDSC/단백질
요약	The present invention describes a novel intervention strategy for the treatment of dysregulated inflammations by using hepatic acute phase proteins serum amyloid A (SAA), CXCL-1/GRO-1/KC or C-reactive protein (CRP) or neutralizing antibodies to these proteins as diseases modulators. The said proteins are to be used as pharmaceutical compositions in the treatment of conditions and diseases characterized by dysregulated inflammations. Besides direct anti-inflammatory as well as host-defensive effects, a hitherto unrecognized regulation of myeloid-derived suppressor cells (MDSC) is uncovered. Myeloid derived suppressor cells seem to be key regulators of inflammatory responses during sepsis and thus represent a valuable target for treatment of these disorders. In a further aspect, the present invention concerns the use of effective amounts of the above identified active agents for activation and mobilisation of MDSC for treatment of excessive dysregulated inflammatory diseases. Further the use of neutralizing antibodies or small molecular inhibitors to treat conditions of suppressed inflammatory responses such as cancer is claimed. The present invention proposes the use of blocking antibodies to SAA, CXCL-1/GRO-1/KC and CRP to prevent MDSC activity and thus boost anti-tumor immune responses in cancer.		

대표청구항	Pharmaceutical composition containing an active ingredient, wherein the active ingredient is an effective amount of serum amyloid A(SAA) alone or active fragment thereof, or a pharmaceutically acceptable salt thereof for the use in the treatment of dysregulated inflammatory diseases or conditions by enhancing the activity of myeloid-derived suppressor cells (MDSC), wherein the dysregulated inflammatory diseases or conditions are autoinflammatory diseases or autoinflammatory diseases with autoimmune components or autoimmune diseases including IBD, rheumatoid arthritis, psoriasis, multiple sclerosis, transplant rejection, graft vs. host and host vs. graft disease, local and systemic inflammatory diseases, a systemic inflammatory response syndrome, sepsis, severe sepsis, septic shock, multi organ dysfunction syndrome, multiple organ failure syndrome and acute transplant rejection.

□ US8916525

TNF-A and TWEAK dual antagonist for the prophylaxis and treatment of autoimmune diseases			
문헌번호 (문헌일)	US8916525 (2014-12-23)	출원번호 (출원일)	13/635868 (2011-03-18)
출원인	한국생명공학연구원 (KR)	기술분류	종양괴사인자/단백질
요약	The present invention relates to TNFR2-TWEAKR fusion protein, more precisely to TNFR2-TWEAKR fusion protein acting as a double-antagonist to TNF-α and TWEAK, known as major causes of autoimmune arthritis which is one of autoimmune diseases. When the composition comprising TNFR2-TWEAKR fusion protein was treated to Th17 cells, the secretion of the inflammatory cytokine IL-17 was reduced but the secretion of the anti-inflammatory cytokine IL-10 generated in Treg cells was increased. Such effect of TNFR2-TWEAKR fusion protein was far greater than that of a single protein such as TNFR2-Fc or TWEAK-Fc. The TNFR2-TWEAKR fusion protein of the present invention has not only excellent treatment effect on arthritis in CIA mouse model not also excellent treatment effect on autoimmune rheumatoid arthritis by increasing the expression of Treg, the immune suppressive cells. Therefore, the TNFR2-TWEAKR fusion protein of the present invention can be effectively used as an active ingredient for the composition for the prevention and treatment of autoimmune disease.		
대표청구항	1. A method for the treatment of autoimmune disease comprising administering a pharmaceutically effective dose of a fusion protein to a subject with autoimmune disease, wherein the fusion protein comprises the full sequence of a TNFR2 (tumor necrosis factor receptor type 2) protein fused to the full sequence of a TWEAKR (TNF-related weak inducer of apoptosis receptor) protein.		

□ US9782454

Highly active polypeptides and methods of making and using the same			
문헌번호 (문헌일)	US9782454 (2017-10-10)	출원번호 (출원일)	13/642757 (2011-04-22)
출원인	LONGEVITY BIOTECH (US)	기술분류	종양괴사인자/단백질
요약	This invention relates to novel compositions comprising analogs of naturally occurring polypeptides, wherein the analog comprises an α-amino acid and at least one β-amino acid. Administration of the compositions may be used for effecting treatment or prevention of a plurality of disease states caused by dysfunctional biochemical or biological pathways. The compositions and methods of this invention are particularly useful to identify novel therapeutic modulators of in-vivo receptor activity with extended half-lives and relevant bioactivity as compared to the naturally translated polypeptides upon which the analogs are derived.		
대표청구항	1. A composition comprising a peptide comprising the amino acid sequence HSDAVFTDNYX1RLX2KQLX1VKX2YLNX1ILN (SEQ ID NO: 1346) or a pharmaceutically acceptable salt thereof, wherein X1 is the beta cyclic amino acid ACPC and X2 is the beta cyclic amino acid APC, and wherein the peptide comprises at least two contiguous patterns of α and β amino acids comprising ααβααβ.		

□ US9409986

IL-1 binding proteins			
문헌번호 (문헌일)	US9409986 (2016-08-09)	출원번호 (출원일)	14/133380 (2013-12-18)
출원인	ABBVIE (US)	기술분류	종양괴사인자/단백질
요약	Proteins that bind IL-1α and IL-1β are described along with their use in compositions and methods for treating, preventing, and diagnosing IL-1-related disorders and for detecting IL-1α and IL-1β in cells, tissues, samples, and compositions.		
대표청구항	1. A method for reducing human IL-1 activity in a human subject in need thereof, comprising administering to the human subject a binding protein, wherein the binding protein comprises an antigen binding domain, said binding protein capable of binding human IL-1β, said antigen binding domain comprising six CDRs: CDR-H1, CDR-H2, CDR-H3, CDR-L1, CDR-L2, and CDR-L3, as defined below: CDR-H1: X1-Y-D-M-S (SEQ ID NO:190), wherein; X1 is, K or R;CDR-H2:		

	Y-X2-S-X4-G-G-X7-G-T-Y-Y-P-D-X14-X15-K-G (SEQ ID NO:191), wherein; X2 is I or V;X4 is S or H;X7 is G or A;X14 is T or S; andX15 is V or A;CDR-H3: G-G-V-X4-K-G-X7-F-D-X10 (SEQ ID NO:192), wherein; X4 is T or Y;X7 is Y or C; andX10 is V, E, L, M, Q, or Y;CDR-L1: R-A-S-G-N-I-X7-X8-X9-L-X11 (SEQ ID NO:193), wherein; X7 is H, Y, or W;X8 is N, G, T, Q, E, H, D, or K;X9 is Y or W; andX11 is T, A, or N;CDR-L2: X1-A-K-X4-L-X6-X7 (SEQ ID NO:194), wherein; X1 is N, Q, or D;X4 is T, N, I, E, or S;X6 is A, M, or E; andX7 is D, E, S, or A;andCDR-L3: Q-X2-F-W-X5-X6-P-X8-X9 (SEQ ID NO:195), wherein; X2 is H or Q;X5 is S, N, T, K, R, or M;X6 is I or L;X8 is Y or A; andX9 is T, I, and N;except thatCDR-H2 cannot be Y-I-S-S-G-G-G-G-T-Y-Y-P-D-T-V-K-G (SEQ ID NO:18);CDR-H3 cannot be G-G-V-T-K-G-Y-F-D-V (SEQ ID NO:19);CDR-L1 cannot be R-A-S-G-N-I-H-N-Y-L-T (SEQ ID NO:20);CDR-L2 cannot be N-A-K-T-L-A-D (SEQ ID NO:21); andCDR-L3 cannot be Q-H-F-W-S-I-P-Y-T (SEQ ID NO:22), such that the human IL-1 activity in the human subject suffering from a disorder in which IL-1 activity is detrimental is reduced.

4-5 펩타이드

☐ CN103848751

Ionizable cation lipid compound and application thereof			
문헌번호 (문헌일)	CN103848751 (2015-12-30)	출원번호 (출원일)	2013-10557038 (2013-11-11)
출원인	SHANGHAI JIAO TONG UNV (CN)	기술분류	MDSC/펩타이드
요약	The invention relates to an ionizable cation lipid compound in the technical field of gene treatment and application thereof. The invention further relates to a lipid prepared from the ionizable cation lipid compound; and the application refers to that the lipid is used as a gene drug carrier transporting system. After the lipid prepared from the ionizable cation is compounded with the gene drug siRNA, a compound which is small in grain size and uniform in distribution can be formed. Meanwhile, the ionizable cation lipid compound is electroneutral in an environment with pH of 7.0, in-vivo stability of the lipid compound is increased, and cell toxicity caused by too many positive charges is reduced. The lipid provided by the invention can be modified by lipid polypeptides specifically combined by myeloid derived suppressor cells (MDSCs), and can transfer fluorescent gene drugs in vitro to enter MDSCs.		
대표청구항	1. be an ionizable cation lipid compound for head base with amino acid, it is characterized in that, its structural formula is such as formula shown in L2:		

4-6 핵산

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	KR10-1452313	10-2012-0085938	2012-08-06	항염 및 피부 재생 효과를 갖는 화장료 조성물	비알팜
2	US9078823	13/687644	2012-11-28	Compositions and methods for gene silencing	RUTGERS, THE STATE UNV OF NEW JERSEY
3	US9605266	14/801710	2015-07-16	Cell-specific internalizing RNA aptamers against human CCR5 and uses therefore	CITY OF HOPE

□ KR10-1452313

항염 및 피부 재생 효과를 갖는 화장료 조성물			
문헌번호 (문헌일)	KR10-1452313 (2014-10-13)	출원번호 (출원일)	10-2012-0085938 (2012-08-06)
출원인	비알팜 (KR)	기술분류	인터루킨/핵산
요약	본 발명은 발아 보리추출물을 유효성분으로 함유하는 항염 및 피부 재생 효능을 갖는 화장료 조성물로서, 항염 및 피부 재생 효능 성분의 효과를 배가시키기 위하여 연어 정소에서 추출한 핵산을 혼합 사용하는, 화장료 조성물에 관한 것이다.		
대표청구항	발아 보리추출물 및 연어 정소에서 추출한 핵산을 함유하고,상기 발아 보리추출물은 화장료 조성물 총 중량에 대하여 0.01~10 중량%의 양으로 함유되고,상기 연어 정소에서 추출한 핵산은 화장료 조성물 총 중량에 대하여 0.001~10 중량%의 양으로 함유되며,인터루킨-6 및 인터루킨-8의 발현을 억제하고 종양괴사인자-α(Tumornecrosis factor-α: TNF-α)의 생합성을 억제하여 피부 염증을 억제하는 것을 특징으로 하는,피부 개선용 화장료 조성물.		

□ US9078823

Compositions and methods for gene silencing			
문헌번호 (문헌일)	US9078823 (2015-07-14)	출원번호 (출원일)	13/687644 (2012-11-28)
출원인	RUTGERS, THE STATE UNV OF NEW JERSEY (US)	기술분류	종양괴사인자/핵산
요약	Compositions and methods for modulating the expression of a protein of interest are provided.		
대표청구항	1. A method of treating a disease or disorder in a subject, said method comprising administering at least one composition comprising at least one U1 adaptor for inhibiting the expression of at least one gene and at least one pharmaceutically		

	acceptable carrier, wherein said U1 adaptor is a nucleic acid molecule comprising an annealing domain operably linked to at least one effector domain, wherein said annealing domain hybridizes to the pre-mRNA of said gene, and wherein said effector domain hybridizes to the U1 snRNA of U1 snRNP.

□ US9605266

Cell-specific internalizing RNA aptamers against human CCR5 and uses therefore			
문헌번호 (문헌일)	US9605266 (2017-03-28)	출원번호 (출원일)	14/801710 (2015-07-16)
출원인	CITY OF HOPE (US)	기술분류	neutralize virus/핵산
요약	Provided herein are fluoropyrimidine-modified RNA aptamers capable of binding CCR5. The compositions and methods provided herein are, inter alia, useful for the delivery of anti-viral drugs (e.g., siRNAs) and preventing HIV entry into a target cell.		
대표청구항	1. A chimeric construct comprising an aptamer and antiviral siRNA, optionally linked by a suitable linker, wherein said aptamer has at least 80% sequence identity with G-3(SEQ ID NO: 1)5-GGG AGG ACG AUG CGG GCC UUC GUU UGU UUC GUC CACAGA CGA CUC GCC CGA-3′.		

4-7 기타 바이오 의약품

□ 주요특허 목록

No	문헌번호	출원번호	출원일	발명의 명칭	출원인
1	KR10-1287120	10-2011-0111564	2011-10-28	락토바실러스 플란타룸 DSR CK10또는 락토바실러스 플란타룸 DSR M2를 유효성분으로 함유하는 암 치료용 조성물	대상에프앤에프
2	KR10-1501210	10-2012-0084135	2012-07-31	항-염증 활성이 우수한 신규 균주	중앙대학교
3	KR10-1599769	10-2012-0088050	2012-08-10	신규한 락토코쿠스 종 균주 및 이의 용도	한국생명공학연구원
4	US10598653	14/355174	2012-10-31	Methods of blocking cancer stem cell growth	BIONOMICS
5	US9452205	14/035070	2013-09-24	Recombinant Lactococcus lactis expressing Escherichia coli colonization factor antigen I (CFA/I) fimbriae and their methods of use	MONTANA STATE UNV
6	KR10-1611834	10-2015-0080879	2015-06-08	비만 및 비만으로 야기된 대사성 질환의 예방 또는 치료를 위한 락토바실루스 플란타룸 CBT LP3 균주 및 이를 포함하는 조성물	쎌바이오텍

□ KR10-1287120

락토바실러스 플란타룸 DSR CK10또는 락토바실러스 플란타룸 DSR M2를 유효성분으로 함유하는 암 치료용 조성물			
문헌번호 (문헌일)	KR10-1287120 (2013-07-11)	출원번호 (출원일)	10-2011-0111564 (2011-10-28)
출원인	대상에프앤에프 (KR)	기술분류	인터루킨/기타바이오의약품(균주)
요약	본 발명은 식물성 유산균을 유효성분으로 함유하는 염증질환 또는 암 치료용 조성물에 관한 것으로, 본 발명의 락토바실러스 플란타룸 DSR CK10 또는 락토바실러스 플란타룸 DSR M2는 면역 반응에 의한 TNF-α, IL-6 및 MCP-1 중에서 어느 하나 이상의 사이토카인의 발현을 억제하거나 또는 산화질소의 생성을 억제하여 염증질환을 치료하며, 암세포주의 성장을 억제하는 활성을 가져 암을 치료 또는 예방하므로, 약학 조성물, 식품 조성물 및 사료 조성물로 활용될 수 있다.		
대표청구항	락토바실러스 플란타룸 DSR CK10[기탁번호: KFCC-11433P] 또는 락토바실러스 플란타룸 DSR M2[기탁번호: KFCC-11432P]를 유효성분으로 함유하는 암 치료용 약학 조성물.		

□ KR10-1501210

항-염증 활성이 우수한 신규 균주			
문헌번호 (문헌일)	KR10-1501210 (2015-03-04)	출원번호 (출원일)	10-2012-0084135 (2012-07-31)
출원인	중앙대학교 (KR)	기술분류	인터루킨/기타바이오의약품(균주)
요약	본 발명은 락토바실러스 카제이 (Lactobacilluscasei) MCL 균주(KCCM 11290P), 이의 배양 추출물 또는 이에 의해 발효된 우유 발효물을 유효성분으로 포함하는 염증 억제용 조성물, 상기 균주를 우유에 접촉시키는 단계를 포함하는 염증 억제 활성을 가지는 발효유 제조방법 및 상기 균주를 유효성분으로 포함하는 염증 억제 활성을 가지는 발효유 제조용 스타터 배양(starter culture) 조성물에 관한 것이다. 본 발명의 균주는 다양한 염증 유발인자의 발현을 유의하게 감소시키고 항-염증 인자의 발현을 크게 증가시킴으로써 면역조절 이상으로 인한 염증성 질환의 예방, 치료 또는 개선용 조성물로 유용하게 이용될 수 있다.		
대표청구항	락토바실러스 카제이 (Lactobacillus casei) MCL 균주(KCCM 11290P), 이의 배양 추출물 또는 이에 의해 발효된 우유 발효물을 유효성분으로 포함하는 TNF-α(Tumor necrosis factor-α), IL-1β(interleukin-1β), IL-6(interleukin-6), COX-2(cyclooxygenase-2) 및 iNOS(inducible nitric oxide synthase)로 구성된 군으로부터 선택되는 염증 유발 인자의 발현을 억제하는 것을 특징으로 하는 염증 억제용 조성물.		

□ KR10-1599769

신규한 락토코쿠스 종 균주 및 이의 용도			
문헌번호 (문헌일)	KR10-1599769 (2016-02-26)	출원번호 (출원일)	10-2012-0088050 (2012-08-10)
출원인	한국생명공학연구원 (KR)	기술분류	인터루킨/기타바이오의약품(균주)
요약	본 발명은 신규한 균주인 수탁번호 KCTC 12170BP의 락토코쿠스 종(Lactococcus sp.) KR-050L; 상기 락토코쿠스 종 KR-050L 배양액, 균체 또는 상등액, 이들의 추출물 또는 이의 분획물을 유효성분으로 포함하는 염증성 질환 또는 암의 예방 또는 치료용 약학조성물; 상기 락토코쿠스 종 KR-050L 배양액, 락토코쿠스 종 KR-050L 균체 또는 상등액, 이들의 추출물 또는 이의 분획물을 함유하는 IL-6(interleukin-6) 또는 IL-11에 의해 유도되는 STAT3(signal transducers and activators of transcription 3)에 대한 활성저해용 조성물; 상기 락토코쿠스 종(Lactococcus sp.) KR-050L 또는 이의 배양물을 포함하는 식품, 식품첨가제, 사료 또는 사료첨가제; 및 상기 락토코쿠스 종(Lactococcussp.) KR-050L 또는 이의 배양물을 포함하는 개인위생용품을 제공하는 것이다.		
대표청구항	수탁번호 KCTC 12170BP의 락토코쿠스 종(Lactococcussp.) KR-050L.		

□ US10598653

Methods of blocking cancer stem cell growth			
문헌번호 (문헌일)	US10598653 (2020-03-24)	출원번호 (출원일)	14/355174 (2012-10-31)
출원인	BIONOMICS (US)	기술분류	야누스 키나아제/기타바이오의약품(세포치료제)
요약	Disclosed herein are antibodies against GPR49 and uses of such antibodies. The antibodies can be monoclonal, humanized, or fully human antibodies against GPR49, hybridomas or other cell lines expressing such antibodies, nucleic acids and vectors comprising nucleic acids encoding for such antibodies, and methods of blocking cancer stem cell growth with such antibodies.		
대표청구항	1. A method to measure activity of a monoclonal antibody that binds a G-Protein Coupled Receptor 49 (GPR49) polypeptide to inhibit growth of cancer stem cells, comprising: growing a tumorsphere of primary colon cancer stem cells, wherein the tumorsphere is derived from a single colon tumor cell and is grown in serum-free and low-anchorage conditions;contacting a monoclonal antibody that binds to GPR49 polypeptide with a Kd of less than 10×10−9 M with the tumorsphere of cancer stem cells, wherein the GPR49 polypeptide comprises the amino acid sequence of SEQ ID NO: 1, and wherein the monoclonal antibody has activity to		

	block cancer stem cell growth in vitro and antitumor activity to human cells in vivo; andmeasuring the activity of the monoclonal antibody to inhibit growth of the population of tumorspheres.

□ US9452205

Recombinant Lactococcus lactis expressing Escherichia coli colonization factor antigen I (CFA/I) fimbriae and their methods of use			
문헌번호 (문헌일)	US9452205 (2016-09-27)	출원번호 (출원일)	14/035070 (2013-09-24)
출원인	MONTANA STATE UNV (US)	기술분류	종양괴사인자/기타바이오의약품(균주)
요약	The present disclosure relates generally to therapeutic compositions comprising recombinant bacteria. Further, the disclosure elaborates upon methods of utilizing the taught therapeutic compositions to treat autoimmune and inflammatory disease. The present teachings also relate to the disclosed recombinant bacteria and methods of producing the recombinant bacteria utilized in the compositions and methods. Further taught herein are dietary supplements and food additive compositions comprising the taught recombinant bacteria.		
대표청구항	1. A composition for the treatment of an autoimmune or inflammatory disease, the composition comprising: a recombinant Lactococcus lactis bacterial cell comprising a nucleotide sequence coding for enterotoxigenic Escherichia coli colonization factor antigen I fimbriae genes cfaA, cfaB, cfaC, and cfaE, wherein the bacterial cell expresses E. coli colonization factor antigen 1 fimbriae genes cfaA, cfaB, cfaC, and cfaE; and wherein the cfaA gene comprises SEQ ID NO: 3, the cfaB gene comprises SEQ ID NO: 2, the cfaC gene comprises SEQ ID NO: 4, and the cfaE gene comprises SEQ ID NO: 5, and an acceptable carrier.		

□ KR10-1611834

비만 및 비만으로 야기된 대사성 질환의 예방 또는 치료를 위한 락토바실루스 플란타룸 CBT LP3 균주 및 이를 포함하는 조성물			
문헌번호 (문헌일)	KR10-1611834 (2016-04-06)	출원번호 (출원일)	10-2015-0080879 (2015-06-08)
출원인	쎌바이오텍 (KR)	기술분류	인터루킨/기타바이오의약품(균주)
요약	본 발명은 비만 및 비만으로 야기된 대사성 질환의 치료 또는 예방을 위한 락토바실루스플란타룸 CBT LP3(KCTC 10782BP) 균주 및 이러한 균주를 포함하는 비만 및 비만으로 야기된 대사성 질환 치료 또는 예방용 약제학적 조성물 및 비만 및 비만으로 야기되는 대사성 질환을 개선하거나 예방하기 위한 기능성 식품 조성물에 관한 것이다.		
대표청구항	장정착성이 우수하고, IL-6, TNF-α 및 IL-1β의 분비를 억제하여 항염증 활성을 갖는락토바실루스 플란타룸 CBT LP3 (Lactobacillus plantarum CBT LP3)(수탁번호: KCTC 10782BP) 균주를포함하는 비만, 과체중 또는 고지혈증 치료 또는 예방을 위한 의약.		