

Document	Title	Abstract	Claims	Patentee	Granted	Priority
EP3005996B1	GLAUCOMA TREATMENT DEVICE	Devices (525) are adapted for implanting into the eye. An incision is formed in the cornea of the eye and a shunt (105) is inserted through the incision into the anterior chamber of the eye. The shunt includes a fluid passageway. The shunt is passed along a pathway from the anterior chamber through the scleral spur of the eye into the suprachoroidal space and positioned in a first position such that a first portion of the fluid passageway communicates with the anterior chamber and a second portion of the fluid passageway communicates with the suprachoroidal space to provide a fluid passageway between the suprachoroidal space and the anterior chamber.	1. An ocular implant system for reducing intraocular pressure in an eye, comprising: an ocular implant (105) comprising a proximal implant end (110), a distal implant end (120), and an internal lumen (305) having a proximal lumen end, a distal lumen end, the ocular implant (105) having a cross-sectional shape, wherein the ocular implant (105) is adapted for deployment in the eye such that the distal lumen end is in fluid communication with the suprachoroidal space and the proximal lumen end is in fluid communication with the anterior chamber when the ocular implant (105) is in a deployed location such that the internal lumen provides a fluid passageway for draining aqueous humor from the anterior chamber towards the suprachoroidal space; a delivery instrument (510) comprising a hand-held component (515) operatively coupled to an elongated applier (525), and a deployment structure (530) coupled to the hand-held component and positioned over the applier (525), wherein the elongated applier (525) is adapted for deployment of the ocular implant (105) into the deployed location in the eye by inserting the ocular implant (105) through the anterior chamber of the eye, and through a dissected tissue plane between the ciliary body and the sclera at a location proximate the scleral spur into the deployed location, wherein the ocular implant is configured for deployment through a corneal incision, and the elongated applier (525) having a diameter and cross-sectional shape configured to be inserted through the internal lumen (305) of the ocular implant (105) such that the elongated applier (525) is removably coupled to the ocular implant (105), and the elongated applier (525) is adapted for insertion of the ocular implant (105) through the corneal incision into the anterior chamber of the eye; and the elongated applier (525) is operable to be proximally withdrawn into the deployment structure (530) to uncouple the elongated applier (525) from the ocular implant (105); and the elongated applier (525) having a flexible, curved distal end region (537) arranged to conform to the shape of the deployment structure (530) upon proximal withdrawal of the distal end region (537) into the deployment structure (530); and the deployment structure (530) is arranged such that a distal edge of the deployment structure (530) is operable to abut the proximal implant end (110) when the elongated applier (525) is proximally withdrawn, such that the location of the implant (105) remains fixed in the deployed location during proximal withdrawal of the elongated applier (525).	NOVARTIS AG, 4056 Basel, CH, 101582946	2019-12-04	2006-01-17
EP2709672B1	COMPOSITIONS AND METHODS FOR TREATING RETINAL DISEASES	Disclosed herein are compositions and methods for treating, ameliorating or preventing a retinal disease or condition; improving a photopic (day light) vision; for improving correcting visual acuity, improving macular function, improving a visual field, or improving scotopic (night) vision	1. A formulation, product of manufacture or composition for use in the treatment of a retinal disease or condition in a subject, wherein the formulation, product of manufacture or composition comprises a cell population comprising non-immortal human retinal progenitor cells, wherein the	The Regents of the University of California, Oakland, CA 94607, US, 100236880	2019-12-18	2011-05-18

Document	Title	Abstract	Claims	Patentee	Granted	Priority
		<p>by administration of retinal progenitor cells. The subject matter described herein also provides cell populations comprising retinal progenitor cells and methods of isolation thereof.</p>	<p>formulation is made by mechanically and/or enzymatically dissociating a sample of human retinal tissue obtained from a human at about 12 weeks to about 28 weeks gestational age to generate a dissociated suspension of cells and cell clusters; and culturing the dissociated suspension and/or cell clusters in serum-free media in culture flasks or plates coated with a xeno-free fibronectin or a laminin for: (i) about 10 to 30 passages, or (ii) no more than 10 passages, wherein the cells are passaged by treating with an enzyme at each passage to dissociate the cells and the culture media is supplemented with vitamin C or the vitamin C is added every 1 to 2 days, wherein the vitamin C is added in an amount to have an initial concentration of between about 0.01mg/ml and 0.5 mg/ml, thereby making non-immortal human retinal progenitor cells, wherein the non-immortal human retinal progenitor cells express one or more markers selected from the group consisting of nestin, Sox2, Ki-67, MHC Class I, and Fas/CD95, wherein nestin is expressed by greater than 90% of the cells in the population, wherein Sox2 is expressed by greater than 80% of the cells in the population, wherein Ki-67 is expressed by % greater than 30% of the cells in the population, wherein MHC Class I is expressed by greater than 70% of the cells in the population, and wherein Fas/CD95 is expressed by greater than 30% of the cells in the population.</p> <p>8. A method of making a formulation, product of manufacture or composition comprising a heterogeneous mixture of non-immortal human fetal neural retinal cells, comprising: (a) mechanically and/or enzymatically dissociating a sample of human retinal tissue cells obtained from a human about 12 weeks to about 28 weeks gestational age to generate a dissociated suspension of cells and /or cell clusters, wherein the sample of cells and/or cell clusters are enzymatically dissociated using trypsin or equivalent; and (b) culturing the cells and /or cell clusters in a sterile environment comprising serum-free media in culture flasks or plates coated with a xeno-free fibronectin, an ornithin, a polylysine or a laminin and antibiotics and antifungals or no antibiotics or anti-fungals, for: (i) about 10 to 30 passages, or (ii) no more than 10 passages, wherein the cells are passaged at between 40% to 90% confluence and treated with an enzyme at each passage to dissociate the cells and the culture media is changed about every 1 to 2 days, and wherein the culture media is supplemented with vitamin C or the vitamin C is added every 1 to 2 days, wherein the vitamin C is added in an amount to have an initial concentration between about 0.01mg/ml to about 0.5mg/ml, wherein optionally the cells and/or cell clusters are cultured in a culture media, optionally together with supplements or additives that support cell survival or growth optionally selected from the group consisting of L-glutamine, human recombinant growth factors consisting</p>			

Document	Title	Abstract	Claims	Patentee	Granted	Priority
			<p>of EGF and bFGF (Invitrogen), or other growth factors, and optionally culturing or growing the cells under low oxygen conditions, or oxygen conditions that approximate or closely mimic oxygen levels of a developing fetal retina during gestation, or at about 2%, 2.5%, 3%, 3.5% oxygen, and optionally the media is supplemented with albumin, or recombinant albumin in an amount to have an initial concentration of about 1.0 mg/ml, and optionally the sample of cells is screened for the presence of a pathogen, a bacteria, an endotoxin, a fungus, a mycoplasma, a virus, a hepatitis virus or an HIV virus, and optionally the sample of cells is screened for the presence of a normal karyotype, and optionally the sample of cells does not exhibit elevated telomerase activity, and optionally the sample of cells is screened for viability, optionally the sample of cells is screened for tumorigenicity.</p> <p>11. A method for isolating a population of non-immortal human retinal progenitor cells comprising: mechanically and/or enzymatically dissociating a sample of human retinal tissue that is from a stage after the retina is formed but before photoreceptor outer segments are fully formed throughout the retina and before retinal vascularization is substantially completed or completed to generate a dissociated suspension of cells and cell clusters; and culturing the dissociated suspension for: (i) about 10-30 passages, or (ii) no more than 10 passages, wherein the cells are passaged at between 40% to 90% confluence and treated with an enzyme at each passage to dissociate the cells and the culture media is changed about every 1 to 2 days, and wherein the culture media is supplemented with vitamin C or the vitamin C is added every 1 to 2 days, wherein the vitamin C is added in an amount to have an initial concentration of about 0.01mg/ml to about 0.5 mg/ml. wherein the human retinal progenitor cells express one or more markers selected from the group consisting of nestin, Sox2, Ki-67, MHC Class I, and Fas/CD95, wherein nestin is expressed by greater than 90% of the cells in the population, wherein Sox2 is expressed by greater than 80% of the cells in the population, wherein Ki-67 is expressed by greater than 30% of the cells in the population, wherein MHC Class I is expressed by greater than 70% of the cells in the population, and wherein Fas/CD95 is expressed by greater than 30% of the cells in the population.</p>			
EP2726060B1	MACROGOL 15 HYDROXYSTEARATE FORMULATIONS	Provided herein are compositions, which include an active pharmaceutical ingredient and macrogol 15 hydroxystearate, and methods for using the same for treating diseases or disorder.	1. An ophthalmic composition comprising an active pharmaceutical ingredient in an amount sufficient to contribute to the treatment, prevention or reduction of a symptom or symptoms of an ophthalmic disease or condition; macrogol 15 hydroxystearate; and benzalkonium chloride at a concentration of 10 to 200 ppm.	ALLERGAN INC., Irvine, CA 92612, US, 100074706	2019-12-25	2011-06-29

Document	Title	Abstract	Claims	Patentee	Granted	Priority
EP2958561B1	LIPOXIN ANALOGS FOR USE IN THE TREATMENT OF OPHTHALMIC DISEASES AND DISORDERS	This invention provides compounds, methods and compositions for the treatment of ophthalmic diseases and disorders, including retinal and choroidal disorders and related conditions. More particularly, the invention provides a method of using the provided pharmaceutical compositions for the treatment of ophthalmic diseases and disorders, including retinal and choroidal diseases, and related conditions, upon topical administration to the eye.	<p>1. A compound for use in the reduction of retinal edema, ophthalmic angiogenesis or choroidal neovascularization in the treatment of a subject with an ophthalmic disease or disorder selected from the group consisting of diabetic retinopathy, diabetic macular edema, age related macular degeneration, chronic macular edema, retinal vein occlusions, wherein: the compound has an effective amount of a general stereochemical formula 12 or 13, wherein R is hydrogen, straight chained C 1-16 alkyl, or a salt -M, wherein M is a cation selected from the group consisting of ammonium, tetra-alkyl ammonium, sodium, potassium, magnesium and zinc.</p> <p>9. A compound for use in the reduction of retinal edema, ophthalmic angiogenesis or choroidal neovascularization in the treatment of a subject with an ophthalmic disease or disorder selected from the group consisting of diabetic retinopathy, diabetic macular edema, age related macular degeneration, chronic macular edema, retinal vein occlusions, wherein: the compound has a structure of general formula 6: wherein: A is hydroxy, alkoxy, aryloxy, amino, alkylamino, dialkylamino or -OM, wherein M is a cation selected from the group consisting of ammonium, tetra-alkyl ammonium, sodium, potassium, magnesium and zinc; Z is CH<sub>2</sub> CH<sub>2</sub> W is hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, halo, hydroxy, alkoxy, aryloxy, carboxy, amino, alkylamino, dialkylamino, acylamino, or carboxamido; R<sub>a</sub>, R<sub>b</sub> and R<sub>c</sub> are independently selected from a group consisting of hydrogen, alkyl, aryl, acyl or alkoxyacyl; R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are independently selected from a group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, heteroaryl, halo, hydroxy, alkoxy, aryloxy, acyl, carboxy, amino, alkylamino, dialkylamino, acylamino, or carboxamido.</p>	University of Southern California, Los Angeles, CA 90015, US, 101321851	2019-12-11	2013-02-22
EP2976080B1	CONJUGATES OF ISOQUINOLINE COMPOUNDS AND PROSTAGLANDINS	Described herein are compounds and compositions for treating glaucoma and/or reducing intraocular pressure. Compositions may comprise an isoquinoline compound and a prostaglandin or a prostaglandin analog. Compounds described herein include those in which an isoquinoline compound is covalently linked to a prostaglandin or a prostaglandin analog, and those in which an isoquinoline compound and a prostaglandin free acid together form a salt.	<p>1. A compound according to formula (II): or a pharmaceutically acceptable salt thereof, wherein: Y is selected from the group consisting of alkylene, aryl, heteroaryl, cycloalkyl, and heterocyclyl, any of which may be optionally substituted; B is selected from the group consisting of -NR<sub>1</sub>R<sub>2</sub>, -CH<sub>2</sub>NR<sub>1</sub>R<sub>2</sub>, -CH(R<sub>10</sub>)R<sub>2</sub>, -CCH<sub>3</sub>(R<sub>10</sub>)R<sub>2</sub>, -NHCH(R<sub>10</sub>)R<sub>2</sub>, -N(CH<sub>3</sub>)R<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>R<sub>2</sub>, -CH(R<sub>10</sub>)CH<sub>2</sub>R<sub>2</sub>, and -CH<sub>2</sub>CH(R<sub>10</sub>)R<sub>2</sub>; R<sub>1</sub>, R<sub>2</sub> and R<sub>10</sub> are each independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, amino, aryl, heteroaryl, cycloalkyl and heterocycloalkyl, any of which may be optionally substituted; X<sub>1</sub> and X<sub>2</sub> are independently selected from the group consisting of hydrogen, hydroxy, halogen, alkyl, amino, nitro, cyano, carbonyl, carbonylamino, alkoxy, aryloxy, sulfonyl, sulfonamido, thioalkyl, and carboxyl; and PG is an acyl radical of a prostaglandin selected from latanoprost, bimatoprost, travoprost, tafluprost, AR-102, cloprostenol, 13, 14-dihydrocloprostenol, unoprostone, PGF 1<math>\alpha</math>, PGF 2<math>\alpha</math>, and PGF 3<math>\alpha</math>, or an acyl radical</p>	Aerie Pharmaceuticals Inc., Research Triangle Park, NC 27709, US, 101161501	2019-12-25	2013-03-15

Document	Title	Abstract	Claims	Patentee	Granted	Priority
			of formula (IV): or an optical isomer, diastereomer, or enantiomer thereof, wherein: the dashed lines independently indicate the presence or absence of a bond; A and B are independently $-(CR a R b)_n-$ , wherein each R a and R b is independently hydrogen or C 1 -C 6 alkyl, and n is 0, 1, 2, 3, or 4; R 1 is $-C(O)-$ ; R 2 is hydrogen or C 1 -C 6 alkyl; R 3, R 4 and R 5 are independently hydrogen or an alcohol protecting group; Y is a bond, $-O-$ , $-S-$ , $-S(O)-$ , $-SO 2-$ , $-C(R g)_2-$ , $-CR h =CR i-$ , $-NR j-$ , or $-C=C-$ ; Z is hydrogen, cycloalkyl, heterocyclyl, aryl, or heteroaryl; R g, R h and R i are independently hydrogen, C 1 -C 6 alkyl, alkoxy, or hydroxy; and R j is hydrogen or C 1 -C 6 alkyl.			
EP2990040B1	THERAPEUTIC AGENT FOR EYEGROUND DISEASE	Disclosed herein is a prophylactic or therapeutic agent for ocular fundus disease, especially diabetic retinopathy or age-related macular degeneration. The prophylactic or therapeutic agent for ocular fundus disease comprising: (S)-(-)-1-(4-fluoro-5-isoquinolinesulfonyl)-2-methyl-1, 4-homopiperazine, a salt thereof, or a solvate thereof, as an active ingredient.	1. (S)-(-)-1-(4-fluoro-5-isoquinolinesulfonyl)-2-methyl-1, 4-homopiperazine, a salt thereof, or a solvate thereof for use in a method of preventing or treating ocular fundus disease, wherein the ocular fundus disease is diabetic retinopathy or diabetic macular edema.	Kyushu University National University Corporation, Fukuoka-shi, Fukuoka 812-8581, JP, 100776057   Kowa Company Ltd., Nagoya-shi, Aichi 460-8625, JP, 101234873	2019-12-04	2013-04-24
EP3110805B1	COMPOUNDS FOR TREATMENT OF COMPLEMENT MEDIATED DISORDERS	Compounds, methods of use, and processes for making inhibitors of complement factor D comprising Formula I, or a pharmaceutically acceptable salt or composition thereof are provided. The inhibitors described herein target factor D and inhibit or regulate the complement cascade at an early and essential point in the alternative complement pathway, and reduce factor D's ability to modulate the classical and lectin complement pathways. The inhibitors of factor D described herein are capable of reducing the excessive activation of complement, which has been linked to certain autoimmune, inflammatory, and neurodegenerative diseases, as well as ischemia- reperfusion injury and cancer.	1. A compound of the formula or a pharmaceutically acceptable salt thereof.	Achillion Pharmaceuticals Inc., New Haven, CT 06511, US, 100070800	2019-12-11	2014-02-25
EP3113787B1	IMPROVED RAAV VECTORS AND METHODS FOR TRANSDUCTION OF PHOTORECEPTORS AND RPE CELLS	Disclosed are capsid-modified rAAV particles and expression vectors, as well as compositions and pharmaceutical formulations that comprise them. Also disclosed are methods of preparing and using novel capsid-protein-mutated particle or rAAV vector constructs in a variety of diagnostic and therapeutic applications including, inter alia, as delivery agents for diagnosis, treatment, or amelioration of one or more diseases, disorders, or dysfunctions of the mammalian eye. Also disclosed are methods for subretinal delivery of therapeutic gene constructs to mammalian photoreceptors and retinal pigment epithelial cells, as well as use of the disclosed compositions in the manufacture of medicaments for a variety of in vitro and/or in vivo applications including the treatment of a variety of inherited retinal diseases.	1. A recombinant adeno-associated viral (rAAV) particle comprising: a modified capsid protein, wherein the modified capsid protein comprises one or more non-native amino acid substitutions at positions corresponding to one or more heparin- sulfate-binding surface-exposed amino acid residues of a wild-type AAV2 capsid protein as set forth in SEQ ID NO:2; or to amino acid residues corresponding thereto in any one of the wild-type AAV1, AAV3, AAV4, AAV5, AAV6, AAV7, AAV9, or AAV10 capsid proteins, as set forth, respectively, in SEQ ID NO: 1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:9, or SEQ ID NO: 10, wherein the non-native amino acid substitutions occur at amino acid residues: (a) Y444, T491, Y500, R585, R588, R487, and Y730; (b) Y444, T491, Y500, R585, and Y730; (c) Y444, T491, Y500, R588, and Y730; (d) Y444, T491, Y500, R585, R588, and Y730; (e) Y444, T491, Y500, E530, R585, R588, R487, and Y730; (f) Y444, T491,	University of Florida Research Foundation Inc., Gainesville, FL 32611, US, 101357610	2019-12-04	2014-03-04

Document	Title	Abstract	Claims	Patentee	Granted	Priority
			Y500, E530, R585, and Y730; (g) Y444, T491, Y500, E530, R588, and Y730; or (h) Y444, T491, Y500, E530, R585, R588, and Y730 of the wild-type AAV2 capsid protein as set forth in SEQ ID NO:2, or at equivalent amino acid positions corresponding thereto in any one of the wild-type AAV1, AAV3, AAV4, AAV5, AAV6, AAV7, AAV9, or AAV10 capsid proteins, as set forth, respectively, in SEQ ID NO: 1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:9, or SEQ ID NO: 10.   2. A nucleic acid vector that encodes a modified capsid protein, wherein the modified capsid protein comprises one or more non-native amino acid substitutions at positions corresponding to one or more heparin-sulfate -binding surface-exposed amino acid residues of a wild-type AAV2 capsid protein as set forth in SEQ ID NO:2; or to amino acid residues corresponding thereto in any one of the wild-type AAV1, AAV3, AAV4, AAV5, AAV6, AAV7, AAV9, or AAV10 capsid proteins, as set forth, respectively, in SEQ ID NO: 1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:9, or SEQ ID NO: 10, wherein the non-native amino acid substitutions occur at amino acid residues: (a) Y444, T491, Y500, R585, R588, R487, and Y730; (b) Y444, T491, Y500, R585, and Y730; (c) Y444, T491, Y500, R588, and Y730; (d) Y444, T491, Y500, R585, R588, and Y730; (e) Y444, T491, Y500, E530, R585, R588, R487, and Y730; (f) Y444, T491, Y500, E530, R585, and Y730; (g) Y444, T491, Y500, E530, R588, and Y730; or (h) Y444, T491, Y500, E530, R585, R588, and Y730 of the wild-type AAV2 capsid protein as set forth in SEQ ID NO:2, or at equivalent amino acid positions corresponding thereto in any one of the wild-type AAV1, AAV3, AAV4, AAV5, AAV6, AAV7, AAV9, or AAV10 capsid proteins, as set forth, respectively, in SEQ ID NO: 1, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:9, or SEQ ID NO: 10.			
EP3450553B1	MRNA THERAPY FOR TREATMENT OF OCULAR DISEASES	The present invention provides, among other things, a method of ocular delivery of messenger RNA (mRNA), comprising administering into an eye of a subject in need of delivery a composition comprising an mRNA encoding a protein, such that the administration of the composition results in expression of the protein encoded by the mRNA in the eye.	1. A composition comprising an mRNA encoding a therapeutic peptide or polypeptide for use in treating an eye disease, disorder or condition in a subject in need thereof, wherein the composition is administered into an eye of the subject via intravitreal injection such that the administration of the composition results in expression and/or activity of the therapeutic peptide or polypeptide encoded by the mRNA in the eye, wherein the mRNA has a length of 0.5 kb to 5 kb and is encapsulated within a liposome, wherein the liposome comprises one or more cationic lipids, one or more non-cationic lipids, one or more cholesterol-based lipids and one or more PEG-modified lipids.	Translate Bio Inc., Lexington, MA 02421, US, 101744459	2019-12-25	2014-03-24
EP3142664B1	COMPOSITIONS AND METHODS FOR TREATING AND DIAGNOSING OCULAR DISORDERS	Disclosed herein are methods, compounds, such as binders, and compositions that are useful for the diagnosis, treatment, or prevention of an ocular disorder, including the discovery of agents that are efficacious against these	1. A composition for use in treating a diabetic eye disease, comprising an effective amount of a compound of Formula I: or a pharmaceutically acceptable salt thereof, wherein: each of R1 and R2 is independently H or a C1-C6 alkyl and	Translatum Medicus Inc., Toronto, Ontario M5A 2M5, CA, 101593466	2019-12-04	2014-05-15

Document	Title	Abstract	Claims	Patentee	Granted	Priority
		disorders. Also included is the use of a fluorescent compound in an amount effective to indicate the presence of said ocular disorder in order to determine the efficacy of said compounds used in the diagnosis, treatment or prevention of said ocular disorders.	R3 is H or a C1-C6 alkyl, and the compound is to be ophthalmically administered in an effective amount to a subject in need thereof.			
EP3192875B1	SUSTAINED-RELEASE PHARMACEUTICAL COMPOSITION FOR TREATING AND PREVENTING OPHTHALMIC DISEASES	The present invention relates to a terpenoid derivative that has the ability to activate the Keap1/Nrf2/ARE signaling pathway and is excellent in anti-inflammatory action and cytoprotective action, and a sustained-release pharmaceutical composition effective for the treatment and prevention of a posterior eye disease caused by oxidative stress, comprising the terpenoid derivative as an active ingredient. The present invention provides a local administration-type sustained-release pharmaceutical composition for the treatment or prevention of a posterior eye disease, comprising the terpenoid derivative of the present invention as an active ingredient, wherein the sustained-release pharmaceutical composition maintains a pharmacological action thereof for 1 week or longer by the sustained release of the terpenoid derivative under physiological conditions and has a base material administrable to the vitreous body and a form administrable to the vitreous body	<p>1. A terpenoid derivative represented by the following formula (I):</p> <p>2. A terpenoid derivative represented by the following formula (II):</p> <p>6. A method for producing a terpenoid derivative represented by the following formula (III): comprising using a compound represented by the formula (1) as a substrate, culturing together with this compound in a medium <i>Chaetomium</i> sp. SANK 11867 (Deposition No. NITE BP-01916) belonging to the genus <i>Chaetomium</i> capable of transforming the compound to the terpenoid derivative represented by the formula (III), and collecting the terpenoid derivative represented by the formula (III) from the culture.</p> <p>13. A nucleotide sequence having any of the following nucleotide sequences (f) to (j) and encoding a protein having hydroxylase activity against a substrate compound represented by the formula (2): (f) the nucleotide sequence described in SEQ ID NO: 3, (g) the nucleotide sequence described in SEQ ID NO: 4, (h) the nucleotide sequence of DNA hybridizing under stringent conditions to DNA comprising a complementary sequence of any nucleotide sequence defined in the nucleotide sequence (f), (i) a nucleotide sequence having 90% or higher identity to any nucleotide sequence defined in the nucleotide sequence (f), and (j) a nucleotide sequence which does not hybridize under stringent conditions to DNA comprising a complementary sequence of any nucleotide sequence defined in the nucleotide sequence (f) due to the degeneracy of the genetic code, but encodes the same amino acid sequence as the nucleotide sequence defined in any of (f) to (h).</p> <p>14. A protein having any of the following amino acid sequences (k) to (n) and having hydroxylase activity against a substrate compound represented by the formula (2): (k) the amino acid sequence described in SEQ ID NO: 5, (l) the amino acid sequence described in SEQ ID NO: 6, (m) an amino acid sequence derived from any amino acid sequence defined in the amino acid sequence (k) by the deletion, substitution, and/or addition of one amino acid, and (n) an amino acid sequence having 90% or higher identity to any amino acid sequence defined in the amino acid sequence (k).</p> <p>19. <i>Bacillus</i> sp. SANK 70214 (Deposition No. NITE BP-01914) belonging to the genus <i>Bacillus</i>.   20. <i>Bacillus megaterium</i> SANK 70314 (Deposition No. NITE BP-01915) belonging to the genus <i>Bacillus</i>.</p>	Daiichi Sankyo Company Limited, Tokyo 103-8426, JP, 101226854	2019-12-18	2014-09-10

Document	Title	Abstract	Claims	Patentee	Granted	Priority
EP3311817B1	PHARMACEUTICAL COMPOSITION FOR PREVENTING AND TREATING DRY EYE DISEASES, CONTAINING IMATINIB AS ACTIVE INGREDIENT	The present invention relates to a composition for preventing or treating dry eye syndrome or eye diseases caused by dry dyes, containing imatinib as an active ingredient and, more specifically, to an eye bath lotion for preventing or treating dry eye syndrome or eye diseases associated with dry eye syndrome, containing imatinib an active ingredient. Imatinib of the present invention effectively protects the corneal epithelia and inhibits the degeneration thereof, thereby being usable for a use of alleviating or treating dry eye syndrome or eye diseases associated with dry eye syndrome.	1. A pharmaceutical composition comprising imatinib as an active agent for use in preventing and treating dry eye syndrome or dry eye syndrome-associated ocular diseases.   7. An eye drop comprising imatinib as an active ingredient for use in preventing and treating dry eye syndrome or dry eye syndrome-associated ocular diseases.	Avixgen Inc., Seoul 06591, KR, 101831212	2019-12-11	2015-06-22
EP3292115B1	CRYSTALLINE FORM OF FUSED PYRIDINE DERIVATIVE'S MALEATE AND USES THEREOF	The compound of Formula I, the crystalline form thereof, and methods of preparing and using them are provided.	1. A Crystalline Form of the Compound of Formula I, wherein its X-ray powder diffraction pattern has characteristic peaks at diffraction angles $2\theta$ of $8.6^\circ \pm 0.2^\circ$ , $16.5^\circ \pm 0.2^\circ$ and $26.5^\circ \pm 0.2^\circ$ , wherein the diffraction peak positions are calibrated by single crystal silicon which has a 2-theta ( $2\theta$ ) value of 28.443 degrees and wherein a Copper (Cu) target X-ray tube K-Alpha radiation was used as the source.	Betta Pharmaceuticals Co. Ltd., Yuhang, Hangzhou, Zhejiang 311100, CN, 101431487	2019-12-25	2015-07-20
EP3341388B1	CYCLIC PEPTIDOMIMETICS, COMPOSITIONS CONTAINING THEM AND THEIR USE IN THE TREATMENT OF DISEASES ASSOCIATED WITH ANGIOGENESIS	The present invention relates to novel cyclic peptidomimetics, pharmaceutical compositions containing them and their use in the treatment of diseases associated with angiogenesis especially tumors and chronic inflammation in psoriasis, diabetes, degenerative diseases of the eye (ARMD), nephropathy and neuropathy.	1. Cyclic peptidomimetics of general formula I: where m = from 0 to 4, n = from 0 to 4, i = 3 or 4, and where A is selected from the group: -CO-NH-; -NH-CO-; -S-S-; -HN-CO-NH-, CH 2 -CH 2 -; -CH 2 -NH-; -NH-CH 2 -; B is selected from the group: -(CH 2 ) d -NH 2 , where d = from 0 to 4; where k = 3 or 4, Wherein, each chiral center may have L or D and/or R or S configuration, and pharmaceutically acceptable salts, hydrates or other pharmaceutically acceptable complexes. 2. Cyclic peptidomimetics of the Claim 1, characterized in that they exhibit the inhibition of VEGF 165 and NRP-1.	Uniwersytet Warszawski, 00-927 Warszawa, PL, 101461036	2019-12-18	2015-08-27
EP3368006B1	THERAPEUTIC USE OF A STERILE AQUEOUS OPHTHALMIC SOLUTION	The present invention relates to a sterile aqueous ophthalmic solution comprising N-(N-acetylcysteinyl)-chitosan or a pharmaceutically acceptable salt thereof in a carrier solution, wherein the N-(N-acetylcysteinyl)-chitosan has a content of free thiol groups in an amount of from 80 $\mu\text{mol/g}$ polymer to 280 $\mu\text{mol/g}$ polymer, for the specific use in the prevention or treatment of dry eye syndrome or dry eye signs and/or symptoms wherein said solution is applied prior to sleep.	1. A sterile aqueous ophthalmic solution comprising N-(N-acetylcysteinyl)-chitosan or a pharmaceutically acceptable salt thereof in a carrier solution, wherein the N-(N-acetylcysteinyl)-chitosan has a content of free thiol groups in an amount of from 80 $\mu\text{mol/g}$ polymer to 280 $\mu\text{mol/g}$ polymer, for the specific use in the prevention or treatment of dry eye syndrome or dry eye signs and/or symptoms wherein said solution is applied prior to sleep.	Croma-Pharma Gesellschaft m.b.H., 2100 Leobendorf, AT, 101049731	2019-12-04	2015-10-30
EP3383403B1	AMINOPHOSPHINIC DERIVATIVES FOR PREVENTING AND TREATING EYE PAIN	The invention relates to formula (I) compounds R1-NH-CH(R2)-P(=O)(OH)-CH2-C(R3)(R4)-CONH-C(R5)(R6)-COOR7 for the use thereof in treating and/or preventing eye pain.	1. Compounds having the formula (I): (I) R 1 -NH-CH(R 2 )-P(=O)(OH)-CH 2 -C(R 3 )(R 4 )-CONH-C(R 5 )(R 6 )-COOR 7 Wherein: R 1 is - a hydrogen - an (acyloxy)alkyl carbamate group -C(=O)-O-C(R)(R')-OC(=O)-R'' wherein R and R' are each independently a hydrogen, an alkyl group and R'' is an alkyl group. R 2 is: - a linear or branched, saturated or unsaturated hydrocarbon chain having from 1 to 6 carbon atoms R 3 and R 4 are each independently: - a hydrogen - a phenyl or benzyl group, optionally substituted on the phenyl ring by: *1 to 5 halogen atoms, particularly fluorine or	Pharmaleads, 75013 Paris, FR, 100969168	2019-12-25	2015-11-30



Document	Title	Abstract	Claims	Patentee	Granted	Priority
			<p>bromine. *an OH, SH, OR" or SR" radical, R" having the same definition as above. *an amino group optionally mono- or di-substituted by a cyclic or linear aliphatic group having from 1 to 6 carbon atoms. *a trifluoromethyl group *an aromatic or heteroaromatic group having 5 or 6 atoms - a heteroaromatic group having 5 or 6 atoms, containing 1 or 2 heteroatom(s) selected from oxygen, nitrogen or sulphur, wherein the sulphur and nitrogen atoms may be oxidized in S-oxide or N-oxide form. - a methylene substituted by an aromatic or saturated heterocycle having 5 or 6 atoms, the heteroatom being an oxygen, a nitrogen or a sulphur, wherein the nitrogen and sulphur atoms may be oxidized in N-oxide or S-oxide form. R 3 and R 4 are not simultaneously a hydrogen atom R 5 and R 6 are each independently - a hydrogen atom - a linear or branched, saturated or unsaturated hydrocarbon chain having from 1 to 6 carbon atoms R 7 is - a hydrogen - a CH 2 COOR"" or CH(CH 3 )COOR"" radical, R"" being *a saturated hydrocarbon chain having from 1 to 6 carbon atoms, optionally substituted by a C 1 to C 3 alkoxy group, *a C 5 to C 8 cycloalkyl group *a phenyl, benzyl, heteroaromatic or alkylheteroaromatic group. - a CH(R)O-C(O)OR' or CH(R)OC(O)R' group wherein R and R' have the same definitions as above; or a pharmaceutically acceptable salt of said compounds for use in the treatment and/or prevention of eye pain.</p>			
EP3419597B1	MEDICAL COMPOSITION, IN PARTICULAR IN THE FORM OF A MEDICAL GEL, AND USE THEREOF	The present invention relates to a composition, in particular a pharmaceutical composition, preferably for topical use for the purpose of local anesthetization.	<p>1. A composition, in particular a pharmaceutical composition, preferably for topical use for purposes of local anesthetisation, wherein the composition contains lidocaine as a local anesthetic in effective, in particular in pharmaceutically effective, amounts, wherein the composition contains the lidocaine in the form of lidocaine nanocrystals as a dispersion of the lidocaine nanocrystals in a dispersing agent, and wherein the lidocaine nanocrystals contain the lidocaine in a salt-free form in the form of 2-diethylamino-N-(2,6-dimethylphenyl)acetamide.</p>	Farco-Pharma GmbH, 50670 Köln, DE, 100976596	2019-12-18	2016-06-10