(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 April 2015 (30.04.2015)

WIPO | PCT

(10) International Publication Number
WO 2015/059122 A3

(51) International Patent Classification:
C12N 15/113 (2010.01) *A61P 27/02* (2006.01)
A61K 31/713 (2006.01) *A61P 37/08* (2006.01)

(21) International Application Number:
PCT/EP2014/072514

(22) International Filing Date:
21 October 2014 (21.10.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13382415.1 22 October 2013 (22.10.2013) EP

(71) Applicant: **SYLENTIS SAU** [ES/ES]; Parque Tecnológico de Madrid, PCM C/Santiago Grisolía No 2, Tres Cantos, E-28760 Madrid (ES).

(72) Inventors: **JIMENEZ, Ana Isabel**; c/o Sylentis SAU, Parque Tecnológico de Madrid, PCM C/Santiago Grisolía No 2, Tres Cantos, E-28760 Madrid (ES). **PAÑEDA, Covadonga**; c/o Sylentis SAU, Parque Tecnológico de Madrid, PCM C/Santiago Grisolía No 2, Tres Cantos, E-28760 Madrid (ES). **MARTINEZ, Tamara**; c/o Sylentis SAU, Parque Tecnológico de Madrid, PCM C/Santiago Grisolía No 2, Tres Cantos, E-28760 Madrid (ES).

(74) Agent: **MARKS & CLERK LLP**; 62-68 Hills Road, Cambridge Cambridgeshire CB2 1LA (GB).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
20 August 2015

WO 2015/059122 A3

(54) Title: SIRNA AND THEIR USE IN METHODS AND COMPOSITIONS FOR INHIBITING THE EXPRESSION OF THE ORAI1 GENE

(57) Abstract: The invention relates to si RNA molecules and their use in methods and pharmaceutical compositions for inhibiting the expression of the ORAI1 gene. The invention also relates to the use of said si RNAs molecules in the treatment and/or prevention of an eye condition characterised by increased expression and/or activity of ORAI1 gene, preferably said eye condition is conjunctivitis and/or an ocular allergy such as seasonal allergic conjunctivitis, perennial allergic conjunctivitis, vernal keratoconjunctivitis, atopic keratoconjunctivitis, and giant papillary conjunctivitis.