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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 November 2012 (29.11.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/162243 A2

(51) International Patent Classification:
C07K 16/28 (2006.01) *A61K 39/395* (2006.01)
C12N 15/13 (2006.01) *A61P 35/00* (2006.01)

(21) International Application Number:
PCT/US2012/038844

(22) International Filing Date:
21 May 2012 (21.05.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/488,660 20 May 2011 (20.05.2011) US

(71) Applicant *(for all designated States except US)*: **ALDER-BIO HOLDINGS LLC** [US/US]; 101 Convention Center Dr., Ste. 850, Las Vegas, Nevada 89109 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KOVACEVICH, Brian Robert** [US/US]; 13916 233rd St. SE, Snohomish, Washington 98296 (US). **GARCIA-MARTINEZ, Leon F.** [US/US]; 4926 214th St. SE, Woodinville, Washington 98072 (US). **OLSON, Katie** [US/US]; 6700 NE 182nd St. #D207, Kenmore, Washington 98028 (US). **DUTZAR, Benjamin H.** [US/US]; 3124A Franklin Ave. E, Seattle, Washington 98102 (US). **BILLGREN, Jens J.** [US/US]; 7309 Sand Point Way NE #B948, Seattle, Washington 98115 (US). **LATHAM, John A.** [US/US]; 2409 10th Ave. NW, Seattle, Washington 98119 (US). **MITCHELL, Danielle M.** [US/US]; 6522B 24th Ave. NE, Seattle, Washington 98115 (US). **MCNEILL, Patricia Dianne** [US/US]; 1333 South 290th Place, Federal Way, Washington 98003 (US). **JANSON, Nicole M.** [US/US]; 1413 N. 47th St., Seattle, Washington 98103 (US). **LOOMIS, Maria-Cristina** [US/US]; 4807 196th St. SE, Bothell, Washington 98012 (US).

(74) Agent: **TESKIN, Robin L.**; Hunton & Williams LLP, 2200 Pennsylvania Ave. NW, Washington, District of Columbia 20037 (US).

(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, 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, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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.

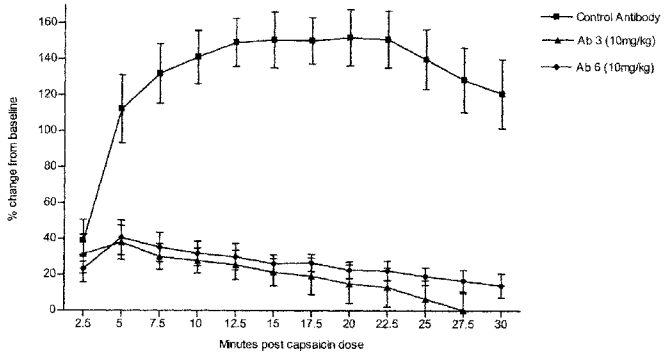
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, 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, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ANTI-CGRP COMPOSITIONS AND USE THEREOF

Figure 39

Reduction in Vasodilatation Following Capsaicin Administration



(57) Abstract: The present invention is directed to antibodies and fragments thereof having binding specificity for CGRP. Another embodiment of this invention relates to the antibodies described herein, and binding fragments thereof, comprising the sequences of the V_H, V_L and CDR polypeptides described herein, and the polynucleotides encoding them. The invention also contemplates conjugates of anti-CGRP antibodies and binding fragments thereof conjugated to one or more functional or detectable moieties. The invention also contemplates methods of making said anti-CGRP antibodies and binding fragments thereof. Embodiments of the invention also pertain to the use of anti-CGRP antibodies, and binding fragments thereof, for the diagnosis, assessment and treatment of diseases and disorders associated with CGRP.

WO 2012/162243 A2

Declarations under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i))*

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

— *with sequence listing part of description (Rule 5.2(a))*