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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 November 2013 (28.11.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/177062 A2

(51) International Patent Classification:
C07K 16/28 (2006.01) *A61K 39/395* (2006.01)
C07K 16/40 (2006.01) *A61P 25/00* (2006.01)
C07K 16/46 (2006.01) *A61K 47/48* (2006.01)

(21) International Application Number:
PCT/US2013/041860

(22) International Filing Date:
20 May 2013 (20.05.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

61/649,878	21 May 2012 (21.05.2012)	US
61/698,495	7 September 2012 (07.09.2012)	US
61/763,915	12 February 2013 (12.02.2013)	US

(71) Applicant *(for all designated States except AL, AT, BE, BG, CH, CN, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IN, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR)*: **GENENTECH, INC.** [US/US]; 1 DNA Way, South San Francisco, California 94080 (US).

(71) Applicant *(for AL, AT, BE, BG, CH, CN, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IN, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR only)*: **F. HOFFMANN-LA ROCHE AG** [CH/CH]; Grenzacherstrasse 124, CH-4070 Basel (CH).

(72) Inventors: **WATTS, Ryan, Jefferson**; c/o Genentech, Inc., 1 DNA Way, South San Francisco, California 94080 (US). **YU ZUCHERO, Joy**; c/o Genentech, Inc., 1 DNA Way, South San Francisco, California 94080 (US). **COUCH, Jessica**; c/o Genentech, Inc., 1 DNA Way, South San Francisco, California 94080 (US). **DENNIS, Mark**; c/o Genentech, Inc., 1 DNA Way, South San Francisco, California 94080 (US).

[Continued on next page]

(54) Title: METHODS FOR IMPROVING SAFETY OF BLOOD-BRAIN BARRIER TRANSPORT

(57) Abstract: The present invention relates to compositions and methods for improving the safety of blood-brain barrier receptor-mediated blood-brain barrier transport.

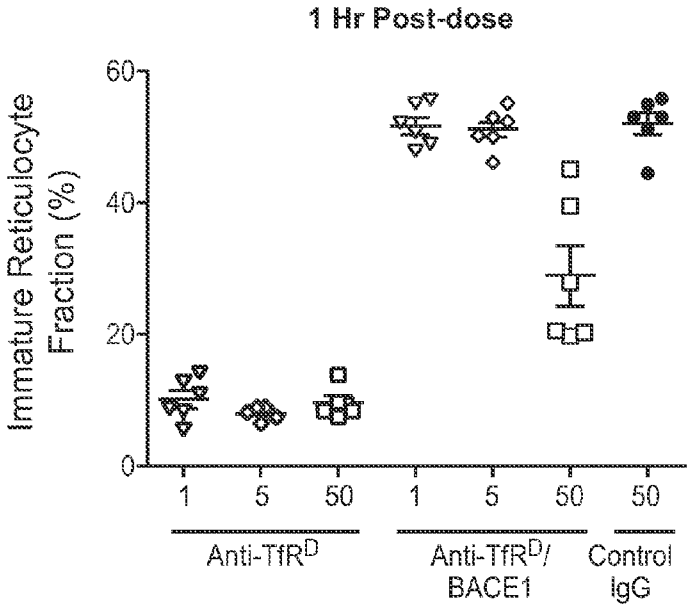


FIG. 2B

WO 2013/177062 A2

(74) **Agents**: **ELLIOTT, Jennifer, L.** et al.; Genentech, Inc., 1 DNA Way, Mail Stop 49, South San Francisco, California 94080 (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, 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, 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, PA, 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).

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))*