

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
5 October 2017 (05.10.2017)



(10) International Publication Number
WO 2017/173384 A1

(51) International Patent Classification:

A61K 31/7068 (2006.01) *A61K 39/00* (2006.01)
A61K 35/17 (2015.01) *A61K 39/395* (2006.01)
A61K 38/17 (2006.01) *A61K 45/06* (2006.01)

(21) International Application Number:

PCT/US2017/025573

(22) International Filing Date:

31 March 2017 (31.03.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/317,068 1 April 2016 (01.04.2016) US

(71) Applicant: **KITE PHARMA, INC.** [US/US]; 2225 Colorado Avenue, Santa Monica, California 90404 (US).

(72) Inventors: **WILTZIUS, Jed**; 2225 Colorado Avenue, Santa Monica, California 90404 (US). **ALVAREZ RODRIGUEZ, Ruben**; 2225 Colorado Avenue, Santa Monica, California 90404 (US).

(74) Agents: **BERNSTEIN, Scott N.** et al.; KITE PHARMA, INC., 2225 Colorado Avenue, Santa Monica, California 90404 (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, DJ, 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, KH, KN, KP, KR, KW, 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))
- with sequence listing part of description (Rule 5.2(a))



WO 2017/173384 A1

(54) Title: CHIMERIC RECEPTORS AND METHODS OF USE THEREOF

(57) Abstract: Antigen binding molecules, chimeric receptors, and engineered immune cells are disclosed in accordance with the invention. The invention further relates to vectors, compositions, and methods of treatment and/or detection using the antigen binding molecules and engineered immune cells.