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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 December 2013 (12.12.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/185115 A1

(51) International Patent Classification:
C07K 16/00 (2006.01) *C07K 16/32* (2006.01)

(21) International Application Number:
PCT/US2013/044843

(22) International Filing Date:
7 June 2013 (07.06.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/657,556 8 June 2012 (08.06.2012) US
61/725,433 12 November 2012 (12.11.2012) US

(71) Applicant: **SUTRO BIOPHARMA, INC.** [US/US]; 310 Utah Avenue, Suite 150, South San Francisco, California 94080 (US).

(72) Inventors: **THANOS, Christopher D.**; 38 Meadow Hill Drive, Tiburon, California 94920 (US). **MCEVOY, Leslie**; 2416 Tamalpais Street, Mountain View, California 94043 (US). **YIN, Gang**; 849 W. Orange Avenue #3004, South San Francisco, California 94080 (US). **PENTA, Kalyani**; 924 Moreno Avenue, Palo Alto, California 94303 (US). **BALIGA, Ramesh**; 1042 Gull Avenue, Foster City, California 94404 (US). **BAJAD, Sunil**; 39430 Civic Center Drive #517, Fremont, California 94538 (US). **POLLITT, Sonia**; 16 Oak Valley Road, San Mateo, California 94402 (US). **MURRAY, Chris**; 700 Olive Springs Road, Soquel, California 95073 (US). **STEINER, Alex**; 1 St. Francis Place #6225, San Francisco, California 94107 (US). **GILL, Avinash**; 6363 Christie Avenue, Apt #2326, Emeryville, California 94608 (US).

(74) Agents: **ANDREWS, Django H.** et al.; Squire Sanders (US) LLP, 275 Battery Street, Suite 2600, San Francisco, California 94111 (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, 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, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

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

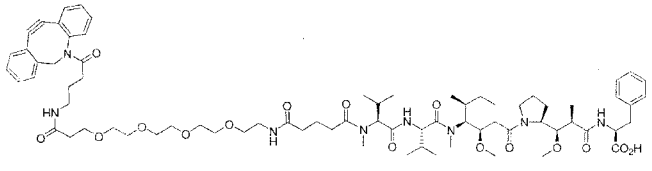
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

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

(54) **Title**: ANTIBODIES COMPRISING SITE-SPECIFIC NON-NATURAL AMINO ACID RESIDUES, METHODS OF THEIR PREPARATION AND METHODS OF THEIR USE

Figure 1



(57) **Abstract**: Provided herein are antibodies comprising non-natural amino acid residues at site-specific positions, compositions comprising the antibodies, methods of their production and methods of their use. The antibodies are useful for methods of treatment and prevention, methods of detection and methods of diagnosis.

WO 2013/185115 A1