



(51) International Patent Classification:

C07K 16/28 (2006.01) *A61K 31/00* (2006.01)
A61K 47/48 (2006.01) *A61P 35/00* (2006.01)

(21) International Application Number:

PCT/US2015/058389

(22) International Filing Date:

30 October 2015 (30.10.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/073,824 31 October 2014 (31.10.2014) US

(71) Applicant: **ABBVIE BIOTHERAPEUTICS INC.**
[US/US]; 1500 Seaport Boulevard, Redwood City, California 94063 (US).

(72) Inventors: **GISH, Kurt C.**; 37 Artuna Avenue, Piedmont, California 94611 (US). **KIM, Han K.**; 2743 Delaware Street, Redwood City, California 94061 (US). **NAUMOVSKI, Louie**; 570 Jay Street, Los Altos, California 94022 (US).

(74) Agents: **DECHERT LLP** et al.; Suite 700, 2440 W. El Camino Real, Mountain View, California 94040-1499 (US).

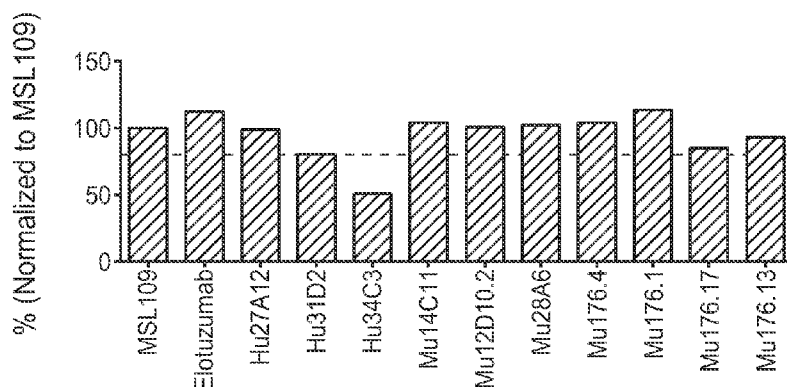
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, 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:

- 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))

(54) Title: ANTI-CS1 ANTIBODIES AND ANTIBODY DRUG CONJUGATES

**FIG. 8**

(57) Abstract: The present disclosure provides antibodies and antibody drug conjugates that bind human CS1 and their uses to treat subjects diagnosed with a plasma cell neoplasm, for example, multiple myeloma.