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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 November 2008 (27.11.2008)

PCT

(10) International Publication Number
WO 2008/144763 A3

(51) International Patent Classification:
A61K 39/395 (2006.01)

(21) International Application Number:
PCT/US2008/064432

(22) International Filing Date: 21 May 2008 (21.05.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/924,550 21 May 2007 (21.05.2007) US

(71) Applicant *(for all designated States except US)*: **ALDER BIOPHARMACEUTICALS, INC.** [US/US]; 11804 North Creek Parkway So., Bothel, WA 98011 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GARCIA-MARTINEZ, Leon** [MX/US]; 4926 214th Street S.E., Woodinville, WA 98072 (US). **JENSEN, Anne, Elisabeth Carvalho** [US/US]; 12401 Marine View Drive, Edmonds, Washington 98026 (US). **OLSON, Katie** [US/US]; 6700 NE 182nd Street, #D207, Kenmore, Washington 98028 (US). **DUTZAR, Ben** [US/US]; 2422 Dexter Avenue, N., #103, Seattle, Washington 98109 (US). **OJALA, Ethan** [US/US]; 2529 200th Place, SW, Lynwood, Washington 98036 (US). **LATHAM, John** [US/US]; 2409 10th Avenue, N.W., Seattle, Washington 98119 (US). **KOVACEVICH, Brian** [US/US]; 13916 233rd Street, SE, Snohomish, Washington 98296 (US). **SMITH, Jeffrey, T.I.** [GB/US]; 9907 156th Place, NE, Redmond, Washington 98052 (US).

(74) Agents: **TESKIN, Robin, L.** et al.; Hunton & Williams, 1900 K Street, N.W., Suite 1100, Washington, District Of Columbia 20006 (US).

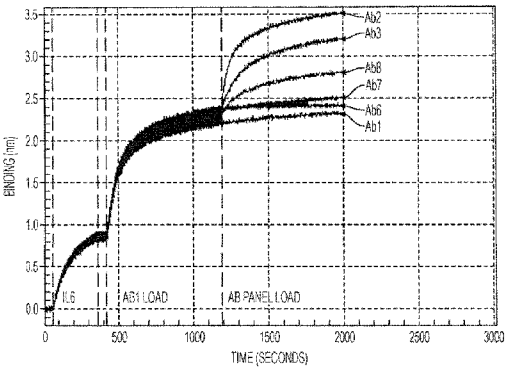
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,

[Continued on next page]

(54) Title: ANTIBODIES TO IL-6 AND USE THEREOF

FIG. 1



(57) Abstract: The present invention is directed to antibodies and fragments thereof having binding specificity for IL-6. 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-IL-6 antibodies and binding fragments thereof conjugated to one or more functional or detectable moieties. The invention also contemplates methods of making said anti-IL-6 antibodies and binding fragments thereof. Embodiments of the invention also pertain to the use of anti-IL-6 antibodies, and binding fragments thereof, for the diagnosis, assessment and treatment of diseases and disorders associated with IL-6. These antibodies may bind at least one of soluble IL-6, cell surface expressed IL-6, IL-6/IL-6R and/or prevent the association of IL-6 and IL-6R, the association of IL-6/IL-6R and gp130 and or the formation of IL-6/IL-6R/gp130 multimers and thereby inhibit a biological effect associated with any of the foregoing.

WO 2008/144763 A3

NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
22 January 2009