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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 February 2011 (03.02.2011)

PCT

(10) International Publication Number
WO 2011/012726 A3

(51) International Patent Classification:
C12N 9/64 (2006.01)

(21) International Application Number:
PCT/EP2010/061192

(22) International Filing Date:
2 August 2010 (02.08.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/230,308 31 July 2009 (31.07.2009) US

(71) Applicants *(for all designated States except US)*: **BAXTER HEALTHCARE S.A.** [CH/CH]; Thurgauer Strasse 130, CH-8152 Glattpark (Opfikon) (CH). **BAXTER INTERNATIONAL INC.** [US/US]; One Baxter Parkway, Deerfield, IL, 60015 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **HASSLACHER, Meinhard** [AT/AT]; Vorgartenstrasse 221/1/7, A-1020 Vienna (AT). **MITTERER, Artur** [AT/AT]; Schwarzeckerweg 10, A-2304 Orth/Donau (AT). **FIEDLER, Christian** [AT/AT]; Raaberbahngasse 18/36, A-1100 Vienna (AT). **MAYER, Christa** [AT/AT]; Bahnhofstrasse 2, A-2412 Wolfsthal (AT).

(74) Agents: **WIEDEMANN, Peter** et al.; HOFFMANN · EITLE, Arabellastrasse 4, 81925 Munich (DE).

(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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, 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))*

(88) Date of publication of the international search report:
31 March 2011

WO 2011/012726 A3

(54) Title: METHOD FOR PURIFYING RECOMBINANT ADAMTS13 AND OTHER PROTEINS AND COMPOSITIONS THEREOF

(57) Abstract: Provided herein are methods for purifying recombinant A Disintegrin-like and Metallopeptidase with Thrombospondin Type 1 Motif 13 (ADAMTS13) protein from a sample. The method comprises enriching for ADAMTS13 protein by chromatographically contacting the sample with hydroxyapatite under conditions that allow ADAMTS13 protein to appear in the eluate or supernatant from the hydroxylapatite. The methods may further comprise tandem chromatography with a mixed mode cation exchange/hydrophobic interaction resin that binds ADAMTS13 protein. Additional optional steps involve ultrafiltration/diafiltration, anion exchange chromatography, cation exchange chromatography, and viral inactivation. Also provided herein are methods for inactivating virus contaminants in protein samples, where the protein is immobilized on a support. Also provided herein are compositions of ADAMTS13 prepared according to said methods.