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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 December 2011 (29.12.2011)

PCT

(10) International Publication Number
WO 2011/161260 A1

(51) International Patent Classification:
C07K 14/435 (2006.01) *C07K 14/705* (2006.01)

(21) International Application Number:
PCT/EP2011/060666

(22) International Filing Date:
24 June 2011 (24.06.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PL391627 25 June 2010 (25.06.2010) PL

(71) Applicant *(for all designated States except US)*: **ADAMED SP. Z O.O.** [PL/PL]; Pieńków 149, PL-05-152 Czosnów k/Warszawy (PL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **PIECZYKOLAN, Jerzy Szczepan** [PL/PL]; Gorajec - Zastawie 47, PL-22-463 Radecznica (PL). **PAWLAK, Sebastian Dominik** [PL/PL]; ul. Majakowskiego 3/2, PL-01-420 Warszawa (PL). **ŻEREK, Bartłomiej Maciej** [PL/PL]; ul. Południowa 45/4, PL-97-200 Dąbrowa (PL). **LEMKE, Krzysztof Kazimierz** [PL/PL]; ul. Batalionów Chłopskich 2A, PL-81-452 Gdynia (PL).

(74) Agent: **SITKOWSKA, Jadwiga**; Al. Komisji Edukacji Narodowej 83/106, PL-02-777 Warszawa (PL).

(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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, 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))*

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))*

(54) Title: ANTICANCER FUSION PROTEIN

(57) Abstract: The fusion protein, especially recombinant, comprising domain (a) which is a functional fragment of soluble hTRAIL protein sequence beginning with an amino acid at a position not lower than hTRAIL95 or a sequence having at least 70% homology thereto; and domain (b) which is a sequence of pro-apoptotic effector peptide, wherein the sequence of domain (b) is attached at C- terminus and/or N - terminus of domain (a). The fusion protein has anticancer activity. The nucleotide sequence coding the fusion protein, expression vector and host cell for the preparation of the fusion protein, and the use of the fusion protein for treating cancer diseases.

WO 2011/161260 A1