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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 June 2021 (24.06.2021)

WIPO | PCT

(10) International Publication Number
WO 2021/119761 A1

(51) International Patent Classification:
C07K 16/24 (2006.01) *G01N 33/543* (2006.01)
A61P 35/00 (2006.01) *A61K 39/00* (2006.01)
G01N 33/574 (2006.01) *A61K 39/395* (2006.01)

(21) International Application Number:
PCT/AU2020/051403

(22) International Filing Date:
18 December 2020 (18.12.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2019904859 20 December 2019 (20.12.2019) AU

(71) Applicant: **HUDSON INSTITUTE OF MEDICAL RESEARCH** [AU/AU]; 27-31 Wright Street, Clayton, Victoria 3168 (AU).

(72) Inventors: **STEPHENS, Andrew N**; 14 Otira Rd, Knoxfield, Victoria 3180 (AU). **RAINCZUK, Adam**; 11 Leslie St, Belgrave, Victoria 3160 (AU). **KANG, Sung-Woog**; 37 Carlyle Way, Malvern East, Victoria 3145 (AU).

(74) Agent: **FB RICE PTY LTD**; Level 33, 477 Collins Street, Melbourne, Victoria 3000 (AU).

(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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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:
— *with international search report (Art. 21(3))*
— *with sequence listing part of description (Rule 5.2(a))*

WO 2021/119761 A1

(54) Title: CXCL10 BINDING PROTEINS AND USES THEREOF

(57) Abstract: The present invention relates to C-X-C motif chemokine ligand 10 (CXCL10) binding proteins and uses thereof in methods of detecting and/or diagnosing a condition in a subject, comprising determining a level of CXCL10 in the subject. Specific antibodies that bind to total CXCL10 (full-length, N -terminally truncated and citrullinated) and antibodies that bind active CXCL10 (full- length) were used to measure the level of total and active CXCL10 in samples from ovarian cancer patients. The calculated ratio of active to total CXCL10 was lower in patients with malignant condition when compared to patients with benign tumours or healthy individuals and is the basis of method of diagnosis of malignant conditions, monitoring tumour burden and disease progression.