

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
19 January 2023 (19.01.2023)



(10) International Publication Number
WO 2023/285686 A2

(51) International Patent Classification:
C07K 14/47 (2006.01)

(21) International Application Number:
PCT/EP2022/069925

(22) International Filing Date:
15 July 2022 (15.07.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
21305993.4 15 July 2021 (15.07.2021) EP
22305328.1 18 March 2022 (18.03.2022) EP

(71) Applicants: **DIOGENX** [FR/FR]; 180 Avenue du Prado, 13008 MARSEILLE (FR). **INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MÉDICALE (INSERM)** [FR/FR]; 101 rue de Tolbiac, 75013 PARIS (FR). **CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)** [FR/FR]; 3 rue Michel Ange, 75016 PARIS (FR). **UNIVERSITÉ CÔTE D'AZUR** [FR/FR]; Grand Château 28 Avenue de Valrose, BP 2135, 06103 NICE CEDEX2 (FR).

(72) Inventors: **COLLOMBAT, Patrick**; 1577 route de Chateaufort, 06690 TOURRETTE LEVENS (FR). **BOTTI, Paolo**; 180, avenue du Prado, 13008 Marseille (FR).

(74) Agent: **PLASSERAUD IP**; 66 rue de la Chaussée d'Antin, 75440 PARIS CEDEX 09 (FR).

(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, 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).

(54) Title: RECOMBINANT VARIANTS OF R-SPONDIN PROTEINS AND THEIR USE

(57) Abstract: The present invention relates to recombinant variants of R-spondin proteins and their use as a medicament, in particular for the treatment of diabetes.

WO 2023/285686 A2