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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 July 2014 (10.07.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/106639 A1

(51) International Patent Classification:
C12N 15/10 (2006.01) *G01N 33/50* (2006.01)
G01N 33/68 (2006.01)

(21) International Application Number:
PCT/EP2014/050032

(22) International Filing Date:
2 January 2014 (02.01.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13305003.9 3 January 2013 (03.01.2013) EP

(71) Applicants: **SANOFI** [FR/FR]; 54, rue La Boétie, F-75008 Paris (FR). **INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE** [FR/FR]; 101, rue de Tolbiac, F-75654 Paris Cedex 13 (FR). **UNIVERSITE DE MONTPELLIER 1** [FR/FR]; 5, boulevard Henri IV, BP 1017, F-34006 Montpellier Cedex 1 (FR). **UNIVERSITE MONTPELLIER 2 SCIENCES ET TECHNIQUES** [FR/FR]; Place Eugène Bataillon, F-34095 Montpellier Cedex 05 (FR). **INSTITUT REGIONAL DU CANCER DE MONTPELLIER** [FR/FR]; 208, rue des Apothicaires, F-34298 Montpellier Cedex 5 (FR).

(72) Inventors: **DARIAVACH, Piona**; 271, avenue du Pic St Loup, Le Verdi II, F-34090 Montpellier (FR). **MARTINEAU, Pierre**; 40, rue des Bragalous, F-34980 Saint Gely du Fesc (FR). **HAHN, Chang**; 250 Hammond Pond Parkway Apt 213S, Chestnut Hill, MA 02467 (US).

(74) Agents: **ERNEST GUTMANN - YVES PLASSERAUD SAS** et al.; 88, Bd des Belges, F-69452 Lyon Cedex 06 (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, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, RW, SD, SL, 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))*

— *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: INTRACELLULAR PHENOTYPIC SCREENING

(57) Abstract: The present invention relates to a method for identifying a cellular target involved in a cell phenotype comprising identifying an intrabody which can modify a cell phenotype and identifying a direct or indirect cellular target of the intrabody. The present invention also relates to intrabodies 3H2-1, 3H2-VH and 5H4 which are capable of inhibiting the degranulation reaction in mast cells triggered by an allergic stimulus, and especially to intrabodies 3H2-1 and 5H4 which are capable of directly or indirectly targeting a protein of the ABCF1 family and of the C120RF4 family respectively. The present invention also relates to ABCF1 and C120RF4 inhibitors for use in therapy, in particular for treating allergic and/or inflammatory conditions.

WO 2014/106639 A1