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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 March 2012 (08.03.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/028622 A3

(51) **International Patent Classification**:
A61K 39/395 (2006.01) ***A61P 29/00*** (2006.01)
C07K 16/28 (2006.01) ***A61P 37/06*** (2006.01)
G01N 33/68 (2006.01) ***A61P 3/10*** (2006.01)
A61P 9/10 (2006.01) ***A61P 17/06*** (2006.01)
A61P 35/00 (2006.01)

(21) **International Application Number**:
PCT/EP2011/064926

(22) **International Filing Date**:
30 August 2011 (30.08.2011)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
10305929.1 31 August 2010 (31.08.2010) EP

(71) **Applicant** *(for all designated States except US)*: **SANOFI** [FR/FR]; 54, rue de la Boétie, F-75008 Paris (FR).

(72) **Inventors; and**

(75) **Inventors/Applicants** *(for US only)*: **CORVEY, Carsten** [DE/DE]; c/o Sanofi-Aventis Deutschland GmbH, 65926 Frankfurt am Main (DE). **BLUM, Horst** [DE/DE]; c/o Sanofi-Aventis Deutschland GmbH, 65926 Frankfurt am Main (DE). **CAMERON, Béatrice** [FR/FR]; c/o sanofi-aventis, Département Brevets, 174, Avenue de France, F-75013 Paris (FR). **DABDOUBI, Tarik** [FR/FR]; c/o sanofi-aventis, Département Brevets, 174, Avenue de France, F-75013 Paris (FR). **DECARY, Stephanie** [FR/FR]; c/o sanofi-aventis, Département Brevets, 174, Avenue de France, F-75013 Paris (FR). **BAURIN, Nicolas** [FR/FR]; c/o sanofi-aventis, Département Brevets, 174, Avenue de France, F-75013 Paris (FR). **PAPIN, David** [FR/FR]; c/o sanofi-aventis, Département Brevets, 174, Avenue de France, F-75013 Paris (FR). **LANGE, Christian** [DE/DE]; c/o Sanofi-Aventis Deutschland GmbH, 65926 Frankfurt am Main (DE).

(74) **Agent**: **SCHNEIDER, Rudolf**; c/o Sanofi-Aventis Deutschland GmbH, 65926 Frankfurt am Main (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, QA, 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 the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

— *of inventorship (Rule 4.17(iv))*

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))*

(88) **Date of publication of the international search report**:
5 July 2012

WO 2012/028622 A3

(54) **Title**: PEPTIDE OR PEPTIDE COMPLEX BINDING TO 2 INTEGRIN AND METHODS AND USES INVOLVING THE SAME

(57) **Abstract**: The present invention relates to a peptide or peptide complex binding to α2 integrin, to one or more nucleic acid(s) coding for the peptide or peptide complex, a recombinant cell producing the peptide or peptide complex, a method for producing the peptide or peptide complex, a pharmaceutical composition comprising the peptide or peptide complex or the nucleic acid(s)for use as a medicament, a method for detecting α2 integrin and a screening method.