

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 February 2007 (15.02.2007)

PCT

(10) International Publication Number
WO 2007/017284 A3

(51) International Patent Classification:

C07K 5/04 (2006.01) **C07K 5/10** (2006.01)
C07K 5/06 (2006.01) **A61K 38/04** (2006.01)
C07K 5/08 (2006.01) **C07D 233/00** (2006.01)

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(21) International Application Number:

PCT/EP2006/007933

(22) International Filing Date: 10 August 2006 (10.08.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

05017391.3 10 August 2005 (10.08.2005) EP

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): **4SC AG** [DE/DE]; Am Klopferspitz 19a, 82152 Martinsried (DE).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LEBAN, Johann** [AT/DE]; Röntgenstrasse 13, 82152 Martinsried (DE). **KRALIK, Martin** [AT/AT]; Zollgasse 23, A-6850 Dornbirn (AT).

Published:

— with international search report

(74) Agent: **VOSSIUS & PARTNER**; Siebertstr. 4, 81675 Munich (DE).

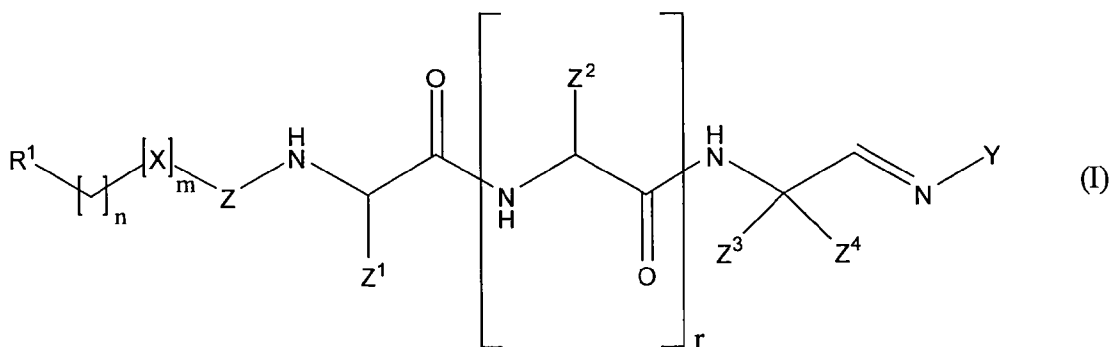
(88) Date of publication of the international search report:

26 July 2007

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: INHIBITORS OF CANCER CELL, T-CELL AND KERATINOCYTE PROLIFERATION



(57) Abstract: The invention relates to compounds of the general formula (I) and salts and physiologically functional derivatives thereof, wherein Y is -NR^aR^b, -NR^cC=ONR^aR^b, -NR^cC=SNR^aR^b, -NR^cC=NR^dN^aR^b, heterocycle, -C=ONR^aR^b, heterocycle, or aryl; n is 0 to 8; m is 0, or 1; r is 0 to 3; t is 0 to 3; X is O or N; Z is CH₂, C=O, C=S or a single bond; Z¹ is CO-R², CS-R², (CH₂)_t-R² or the side-chain of a naturally occurring amino acid; Z² is CO-R², CS-R² or (CH₂)_t-R³ or the side-chain of a naturally occurring amino acid; Z³ is CO-R², CS-R² or (CH₂)_t-R⁴ or the side-chain of a naturally occurring amino acid; Z⁴ is H, alkyl, alkoxy, or cycloalkyl; R¹, R², R³, and R⁴ are independently from each other H, OH, SH, NH₂, CN, NO₂, alkyl, cycloalkyl, heterocycloalkyl, haloalkyl, alkylthio, haloalkoxy, hydroxyalkyl, hydroxyalkylamino, alkylamino, alkylaryl, alkylsulfinyl, alkylsulfonyl, alkylthioalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkoxyalkyl, alkoxy, aryloxy, heteroaryl, aryl, or halogen.