PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A61K 31/00 — A2

(11) International Publication Number: WO 99/17759

(43) International Publication Date: 15 April 1999 (15.04.99)

(21) International Application Number: PCT/US98/20910

(22) International Filing Date: 5 October 1998 (05.10.98)

(30) Priority Data:
60/061,123 6 October 1997 (06.10.97) US

(71) Applicant *(for all designated States except US)*: ASTA MEDICA AKTIENGESELLSCHAFT [DE/DE]; An der Pikardie 10, D–01277 Dresden (DE).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: MCMAHON, Gerald [US/US]; 1414 Greenwich Street, San Francisco, CA 94109 (US). KUTSCHER, Bernhard [DE/DE]; Stresenmannstrasse 9, D–63477 Maintal (DE). GUNTHER, Eckhard [DE/DE]; Wingertstrasse 176, D–63477 Maintal (DE). APP, Harald [DE/US]; 630 27th Street, San Francisco, CA 94131 (US).

(74) Agents: WARBURG, Richard, J. et al.; Lyon & Lyon LLP, Suite 4700, 633 West Fifth Street, Los Angeles, CA 90071–2066 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: METHODS OF MODULATING SERINE/THREONINE PROTEIN KINASE FUNCTION WITH 5–AZAQUINOXALINE–BASED COMPOUNDS

(57) Abstract

The present invention is directed in part towards methods of modulating the function of serine/threonine protein kinases with 5–azaquinoxaline–based compounds. The methods incorporate cells that express a serine/threonine protein kinase, such as RAF. In addition, the invention describes methods of preventing and treating serine/threonine protein kinase–related abnormal conditions in organisms with a compound identified by the invention. Furthermore, the invention pertains to 5–azaquinoxaline compounds and pharmaceutical compositions comprising these compounds.



162162



G00002