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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 February 2002 (28.02.2002)

PCT

(10) International Publication Number
WO 02/016585 A3

(51) International Patent Classification[7]: C12N 15/12, C07K 14/705, 16/28, C12Q 1/68, G01N 33/68, A61K 38/00

(21) International Application Number: PCT/US01/25851

(22) International Filing Date: 17 August 2001 (17.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/226,411	18 August 2000 (18.08.2000)	US
60/261,779	16 January 2001 (16.01.2001)	US

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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
27 March 2003

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.

WO 02/016585 A3

(54) Title: IMIDAZOLINE RECEPTOR HOMOLOGS

(57) Abstract: Novel imidazoline receptor homologs, designated imidazoline receptor related protein 1 (IMRRP1), imidazoline receptor related protein 1b (IMRRP1) and derivatives thereof are described. Pharmaceutical compositions comprising at least one IMRRP1, IMRRP1b or a functional portion thereof are provided as are methods for producing IMRRP1, IMRRP1b or a functional portion thereof. In addition, nucleic acid sequences encoding polypeptides, oligonucleotides, fragments, portions or antisense molecules thereof, and expression vectors and host cells comprising polynucleotides that encode IMRRP1 or IMRRP1b are provided. The use of the nucleic acid sequences, polypeptide, peptide and antibodies for diagnosis and treatment of disorders or diseases associated with aberrant regulation of blood pressure, induction of feeding, stimulation of firing of locus coeruleus neurons, and stimulation of insulin release, as well as the aberrant induction of the expression of glial fibrillary acidic protein independent of the action of alpha-2 adrenoceptors, dysphoric premenstrual syndrome, neurodegenerative disorders such as Alzheimer's disease, opiate addiction, monoamine turnover and therefore nociception, aging, mood and stroke, salivary disorders and developmental disroders is also described.