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(71) Applicant *(for all designated States except US)*: **BRISTOL-MYERS SQUIBB COMPANY** [US/US]; P.O. Box 4000, Route 206 and Provinceline Road, Princeton, NJ 08543-4000 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **FEDER, John, N.** [US/US]; 277 Duchtown Zion Road, Belle Mead, NJ 08502 (US). **MINTIER, Gabe** [US/US]; 318 Morrison Avenue, Highstown, NJ 08520 (US). **KINNEY, Gene, G.** [US/US]; 13 Horseshoe Lane, Middletown, CT 06457 (US). **RAMANATHAN, Chandra, S.** [US/US]; 41 Alison Avenue, Wallingford, CT 06492 (US).

(74) Agent: **KLEIN, Christopher, A.**; Bristol-Myers Squibb Company, P.O. Box 4000, Lawrenceville-Provinceline Road, Princeton, NJ 08543-4000 (US).

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(54) Title: NOVEL 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.

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