Title (en)

MELANOCORTIN-4 RECEPTOR DEFICIENT CELLS, NON-HUMAN TRANSGENIC ANIMALS AND METHODS OF SELECTING COMPOUNDS WHICH REGULATE BODY WEIGHT

Title (de)

ZELLEN MIT DEFIZIENTEM MELANOCORTIN-4-REZEPTOR, NICHT-MENSCHLICHE TRANSGENE TIERE UND VERFAHREN ZUR AUSWAHL VON SUBSTANZEN, DIE DAS KÖRPERGEWICHT REGULIEREN KÖNNEN

Title (fr)

CELLULES DEFICIENTES EN RECEPTEURS 4 DE MELANOCORTINE, ANIMAUX TRANSGENIQUES NON HUMAINS ET PROCEDES DE SELECTION DE COMPOSES QUI REGULENT LE POIDS CORPOREL

Publication

EP 1241934 A4 20050427 (EN)

Application

EP 00980352 A 20001113

Priority

- US 0031061 W 20001113
- US 16507499 P 19991112

Abstract (en)

[origin: WO0133956A1] Cells and non-human transgenic animals have been engineered to be deficient in the gene encoding the melcanocortin-4 receptor protein (MC-4R). These MC-4R deficient transgenic animals can be used to select for and test potential modulators of MC-4R. This data allows for methods of screening for preferential MC-4R modulators which effect body weight through modulation of both metabolic rate and food intake, as well as associated methods of treating various disorders associated with inappropriate regulation of body weight.

IPC 1-7

A01K 67/00; C12N 5/06; C12N 5/10; C12N 15/00; C12N 15/85; C12N 15/86; C12Q 1/00

IPC 8 full level

A01K 67/027 (2006.01); **C07K 14/72** (2006.01); **C12N 5/10** (2006.01); **C12N 15/09** (2006.01); **C12N 15/85** (2006.01); **C12Q 1/02** (2006.01)

CPC (source: EP)

A01K 67/0276 (2013.01); **C07K 14/723** (2013.01); **C12N 15/8509** (2013.01); A01K 2217/05 (2013.01); A01K 2217/075 (2013.01); A01K 2217/20 (2013.01); A01K 2227/105 (2013.01); A01K 2227/50 (2013.01); A01K 2267/03 (2013.01); A01K 2267/0362 (2013.01)

Citation (search report)

- [YD] WO 9747316 A1 19971218 - MILLENNIUM PHARM INC [US]
- [YD] HUSZAR D ET AL: "TARGETED DISRUPTION OF THE MELANOCORTIN-4 RECEPTOR RESULTS IN OBESITY IN MICE", CELL, CELL PRESS, CAMBRIDGE, NA, US, vol. 88, no. 1, 10 January 1997 (1997-01-10), pages 131 - 141, XP000877328, ISSN: 0092-8674
- [Y] MARSH DONALD J ET AL: "Response of melanocortin-4 receptor-deficient mice to anorectic and orexigenic peptides", NATURE GENETICS, vol. 21, no. 1, January 1999 (1999-01-01), pages 119 - 122, XP002289260, ISSN: 1061-4036
- [AD] GANTZ I ET AL: "MOLECULAR CLONING EXPRESSION AND GENE LOCALIZATION OF A FOURTH MELANOCORTIN RECEPTOR", JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 268, no. 20, 15 July 1993 (1993-07-15), pages 15174 - 15179, XP002051983, ISSN: 0021-9258
- [YD] CONE R D ET AL: "THE MELANOCORTIN RECEPTORS: AGONISTS, ANTAGONISTS, AND THE HORMONAL CONTROL OF PIGMENTATION", RECENT PROGRESS IN HORMONE RESEARCH, ACADEMIC PRESS, NEW YORK, NY, US, vol. 51, 1996, pages 287 - 318, XP001098441, ISSN: 0079-9963
- [Y] CHEN W ET AL: "A COLORIMETRIC ASSAY FOR MEASURING ACTIVATION OF GS-AND GQ-COUPLED SIGNALING PATHWAYS", ANALYTICAL BIOCHEMISTRY, ACADEMIC PRESS, SAN DIEGO, CA, US, vol. 226, 1995, pages 349 - 354, XP002051981, ISSN: 0003-2697
- [YD] MILLIGAN G ET AL: "G16 as a universal G protein adapter: implications for agonist screening strategies", TRENDS IN PHARMACOLOGICAL SCIENCES, ELSEVIER TRENDS JOURNAL, CAMBRIDGE, GB, vol. 17, no. 7, July 1996 (1996-07-01), pages 235 - 237, XP004034567, ISSN: 0165-6147
- [A] KASK A ET AL: "DISCOVERY OF A NOVEL SUPERPOTENT AND SELECTIVE MELANOCORTIN-4 RECEPTOR ANTAGONIST (HS024): EVALUATION IN VITRO AND IN VIVO", ENDOCRINOLOGY, BALTIMORE, MD, US, vol. 139, no. 12, December 1998 (1998-12-01), pages 5006 - 5014, XP000913988, ISSN: 0013-7227
- [A] BRINI MARISA ET AL: "Transfected Aequorin in the Measurement of Cytosolic Ca-2+ Concentration ((Ca-2+)-c): A critical evaluation", JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 17, 1995, pages 9896 - 9903, XP002318617, ISSN: 0021-9258
- See references of WO 0133956A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0133956 A1 20010517; CA 2390740 A1 20010517; EP 1241934 A1 20020925; EP 1241934 A4 20050427; JP 2003525596 A 20030902

DOCDB simple family (application)

US 0031061 W 20001113; CA 2390740 A 20001113; EP 00980352 A 20001113; JP 2001535977 A 20001113