

## Title (en)

NOVEL OPIATE COMPOUNDS, METHODS OF MAKING AND METHODS OF USE

## Title (de)

NEUE OPIATE, VERFAHREN ZUR IHRER HERSTELLUNG UND VERWENDUNG DAVON

## Title (fr)

NOUVEAUX COMPOSES OPIACES ET LEURS PROCEDES DE PREPARATION ET D'UTILISATION

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## Abstract (en)

[origin: WO9945925A1] The present invention relates to a class of nitrogen-containing heterocyclic compounds which bind to opioid receptors. The inventive compounds can be used to treat a variety of disease states which involve the opioid receptors.

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## Citation (search report)

- [A] US 5270328 A 19931214 - CANTRELL BUDDY E [US], et al
- [A] US 5319087 A 19940607 - ZIMMERMAN DENNIS M [US], et al
- [Y] EP 0018077 A2 19801029 - LILLY CO ELI [US]
- [E] WO 9933806 A1 19990708 - ORTHO MCNEIL PHARM INC [US], et al
- [A] US 5214148 A 19930525 - FELDMAN PAUL L [US], et al
- [AX] FROIMOWITZ M. ET AL.: "Phenylmorphans and Analogues: Opioid Receptor Subtype Selectivity and Effect of Conformation on Activity", JOURNAL OF MEDICINAL CHEMISTRY, vol. 35, no. 9, 1992, pages 1521 - 1525, XP002203667
- [Y] BERTHA, C. M. ET AL.: "Probes for narcotic Receptor-Mediated Phenomena. 20. Alteration of Opioid Receptor Subtype Selectivity of the 5-(3-Hydroxyphenyl)morphans by Application of the Message-Address Concept: Preparation of .delta.-Opioid Receptor Ligands", JOURNAL OF MEDICINAL CHEMISTRY, vol. 38, no. 9, 1995, pages 1523 - 1537, XP002203668
- [Y] BERTHA, C. M. ET AL.: "A Marked Change of Receptor Affinity of the 2-Methyl-5-(3-hydroxyphenyl)morphans upon Attachment of an (E)-8-Benzylidene Moiety: Synthesis and Evaluation of a New Class of .sigma. Receptor Ligands", JOURNAL OF MEDICINAL CHEMISTRY, vol. 37, no. 19, 1994, pages 3163 - 3170, XP002203669
- [Y] ONG, H. H. ET AL.: "Phenylmorphans Agonists-Antagonists", JOURNAL OF MEDICINAL CHEMISTRY, vol. 17, no. 1, 1974, pages 133 - 134, XP002203670
- [PX] THOMAS J B ET AL: "A Stereoselective Synthetic Approach to N-Alkyl-4beta-methyl-5-phenyl morphans", TETRAHEDRON LETTERS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 40, no. 3, 15 January 1999 (1999-01-15), pages 403 - 406, XP004151342, ISSN: 0040-4039
- [PX] THOMAS, J. B. ET AL.: "N-substituted 9.beta.-Methyl-5-(3-hydroxyphenyl)morphans Are Opioid Receptor Pure Antagonists", JOURNAL OF MEDICINAL CHEMISTRY, vol. 41, no. 21, 1998, pages 4143 - 4149, XP002203671
- [A] CALDERON, S. N.: "Probes for Narcotic receptor Mediated Phenomena. 19. Synthesis of (1)-4-[(.alpha.R)-.alpha.((2S,5R)-4-Allyl-2,5-dimethyl-1-piperazinyl)-3-methoxybenzyl]-N,N-diethylbenzamide (SNC 80): A Highly Selective, Nonpeptide .delta. Opioid Receptor Agonist", JOURNAL OF MEDICINAL CHEMISTRY, vol. 37, no. 14, 1994, pages 2125 - 2128, XP002203672
- [T] THOMAS J B ET AL: "Optically Pure (-)-4-[(N-Allyl-3-Methyl-4-Piperidinyl)Phenylamino]-N, N-Diethylbenzamide Displays Selective Binding and Full Agonist Activity for the delta Opioid Receptor", BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, OXFORD, GB, vol. 9, no. 23, 6 December 1999 (1999-12-06), pages 3347 - 3350, XP004183736, ISSN: 0960-894X
- See references of WO 9945925A1

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