

Title (en)

NOVEL ESTRENES FOR INDUCING HYPOTHALAMIC EFFECTS

Title (de)

ESTRENE ZUR INDUZIERUNG HYPOTHELMISCHER EFFEKTE

Title (fr)

NOUVEAUX ESTRENES EXERANT UNE ACTION SUR L'HYPOTHALAMUS

Publication

EP 0783513 A4 20000308 (EN)

Application

EP 95935237 A 19950929

Priority

- US 9512542 W 19950929
- US 31605094 A 19940929

Abstract (en)

[origin: WO9610032A1] The invention relates to estrene steroid, which bind to neuroepithelial receptors. The steroid is preferably administered in the form of a pharmaceutical composition containing one or more pharmaceutically acceptable carriers. The figure illustrates the synthesis of 1,3,5(10),16-estratetraen-3-ol.

IPC 1-7

C07J 1/00; A61K 31/565; C07J 3/00; C07J 31/00; C07J 53/00; C07J 13/00; C07J 41/00; C07J 71/00; A61K 31/56

IPC 8 full level

A61P 25/00 (2006.01); C07J 1/00 (2006.01); C07J 3/00 (2006.01); C07J 13/00 (2006.01); C07J 31/00 (2006.01); C07J 41/00 (2006.01); C07J 53/00 (2006.01); C07J 71/00 (2006.01); C07J 75/00 (2006.01)

CPC (source: EP KR)

A61P 25/00 (2017.12 - EP); C07J 1/00 (2013.01 - KR); C07J 1/0007 (2013.01 - EP); C07J 1/0055 (2013.01 - EP); C07J 1/0081 (2013.01 - EP); C07J 3/00 (2013.01 - EP KR); C07J 13/002 (2013.01 - EP); C07J 13/005 (2013.01 - EP); C07J 13/007 (2013.01 - EP); C07J 31/006 (2013.01 - EP); C07J 41/0005 (2013.01 - EP); C07J 71/001 (2013.01 - EP); C07J 75/005 (2013.01 - EP)

Citation (search report)

- [X] DE 3741801 A1 19890615 - SCHERING AG [DE]
- [XY] EP 0562843 A2 19930929 - EROX CORP [US]
- [X] US 2984677 A 19610516 - HUFFMAN MAX N
- [X] US 4117234 A 19780926 - JOHNSON WILLIAM S, et al
- [PX] WO 9428903 A1 19941222 - PHERIN CORP [US]
- [X] HAINAUT D ET AL: "Conformational transmission and stability of double bonds. I. Preparation of model derivatives in the DELTA.8 and DELTA.9(11) estrene series", BULLETIN DE LA SOCIETE CHIMIQUE DE FRANCE. 2 PARTIE - CHIMIE ORGANIQUE, BIOCHIMIE., no. 3-4, 1978, PARIS FR, pages 119 - 125, XP002069804
- [Y] G. OHLOFF ET AL: "Structural and Configurational Dependence of the Sensory Process in Steroids", HELVETICA CHIMICA ACTA., vol. 66, no. 1, 1983, BASEL CH, pages 192 - 217, XP002069805
- [Y] L. RUZICKA ET AL: "Über Steroide und Sexualhormone. Untersuchungen über den Zusammenhang zwischen Konstitution und Geruch bei Steroiden. Methyl-androstan- und Allopregnandervate", HELVETICA CHIMICA ACTA., vol. 30, no. 3, 1947, BASEL CH, pages 867 - 878, XP002069806
- [XY] SIGNORET, J. P. ET AL: "Utilization of various synthetic odorous products to facilitate detection of heats in the sow", ANN. ZOOTECH. (1975), 24(4), 639-43, XP002121379
- [X] V. PRELOG ET AL: "29. Steroide und Sexualhormone. Über ein neues Stereoisomeres des Oestriols", HELVETICA CHIMICA ACTA, vol. 28, no. 1, 1945, BASEL CH, pages 250 - 256, XP002121380
- [XY] BOOTH, W. D. ET AL: "The isolation, purification and some properties of pheromaxein, the pheromonal steroid-binding protein, in porcine submaxillary glands and saliva", J. ENDOCRINOL. (1988), 118(1), 47-57, 2 PLATES, XP002121381
- [Y] ROMER J ET AL: "ANDROSTA-4,16-DIENE-3,6-DIONE: AN UNKNOWN MEMBER AMONG THE SMELLING ANDROST-16-ENES", STEROIDS: STRUCTURE, FUNCTION, AND REGULATION, vol. 51, no. 5/06, 1 May 1988 (1988-05-01), pages 577 - 581, XP000027980, ISSN: 0039-128X
- [X] W. JOHNS: "Synthesis of 3-Methoxy-17-acetyl-18-nor-estra-1,3,5(10),16-tetraene", JOURNAL OF ORGANIC CHEMISTRY., vol. 28, no. 7, July 1963 (1963-07-01), AMERICAN CHEMICAL SOCIETY. EASTON., US, pages 1856 - 1861, XP002121382, ISSN: 0022-3263
- [X] BASCOUL, JACQUES ET AL: "Directing effect of skeletal rearrangements", TETRAHEDRON LETT. (1969), (28), 2401-5, XP002121383
- [X] BASCOUL, JACQUES ET AL: "Partial synthesis of natural steroid enantiomers. V. Rearrangement of diteriary epoxides of A-nor and A,19-bisnorsteroids. Example of backbone rearrangement", BULL. SOC. CHIM. FR. (1969), (1), 189-94, XP002121384
- [X] U. KLEIN ET AL: "Notiz zur Thermolyse von (17S)-3-Methoxyspiro-[1,3,5(10)-estratrien-17,2'-oxiran]", CHEMISCHE BERICHTE., vol. 110, no. 6, June 1977 (1977-06-01), VERLAG CHEMIE GMBH. WEINHEIM., DE, pages 2401 - 2403, XP002121385, ISSN: 0009-2940
- [X] ARUNACHALAM T ET AL: "Iodoestrogens, syntheses, and interaction with uterine receptors", JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 254, no. 13, 10 July 1979 (1979-07-10), pages 5900 - 5905, XP002089838, ISSN: 0021-9258
- [XY] M. A. KRAEVSKAYA ET AL: "Molecular Mechanisms of Olfaction: Binding of Boar Sex Pheromone 5.alpha.-Androst-16-en-3-one and Its Analogs by Cytosolic Fraction of Porcine Olfactory Epithelium", SENSORY SYSTEMS (ENGLISH TRANSLATION - PLENUM PUBLISHING CORP), vol. 1, no. 2, 1987, pages 99 - 107, XP002124893
- [X] H. TAKAGI ET AL: "Synthesis and mechanism of hydrolysis of estrogen 6-sulfates: model compounds for demonstrating the carcinogenesis of estrogen", STEROIDS: STRUCTURE, FUNCTION, AND REGULATION., vol. 56, no. 4, 1991, ELSEVIER SCIENCE PUBLISHERS, NEW YORK, NY., US, pages 173 - 179, XP002121386, ISSN: 0039-128X
- [X] M. PONS ET AL: "Structural requirements for maximal inhibitory allosteric effect of estrogens and estrogen analogs on glutamate dehydrogenase", EUR. J. BIOCHEM., vol. 84, no. 1, 1978, pages 257 - 266, XP002121388
- [X] H. DANNNENBERG ET AL: "Über die durch Friedel-Krafts-Acylierung von delta-1,3,5(10)-Östratrien-Verbindungen zugänglichen Amine", CHEMISCHE BERICHTE, vol. 97, no. 1, 1964, WEINHEIM DE, pages 140 - 150, XP002121389
- [X] J. P. DUSZA ET AL: "STEROID CONJUGATES IV. THE PREPARATION OF STEROID SULFATES WITH TRIETHYLAMINE-SULFUR TRIOXIDE", STEROIDS., vol. 12, no. 1, July 1968 (1968-07-01), ELSEVIER SCIENCE PUBLISHERS, NEW YORK, NY., US, pages 49 - 61, XP002121390
- [X] O. N. MINAILOVA ET AL: "Silylsteroids VIII. Synthesis of 1.alpha.-(trimethylsilyl)-19-nortestosterone and its Analogs by the Reductive Silylation of Estradiol Ethers", JOURNAL OF GENERAL CHEMISTRY USSR., vol. 53, no. 3, March 1983 (1983-03-01), CONSULTANTS BUREAU. NEW YORK., US, pages 539 - 550, XP002121391

- [X] M. MOUSSERON-CANET ET AL: "Orientation stérique de l'époxidation en série stérolique. II - Conformation et réactivité de nor-19 stéroïdes et de des-D dinor-18,19-stéroïdes", BULLETIN DE LA SOCIETE CHIMIQUE DE FRANCE., no. 12, 1966, SOCIETE FRANCAISE DE CHIMIE. PARIS., FR, pages 3858 - 3867, XP002121392, ISSN: 0037-8968
- [X] A. CALVET ET AL: "Vitesses de Reduction de Ceto-3- Steroides par le Tri-tert-butoxy-Hydruro Aminate de Sodium", TETRAHEDRON LETTERS., no. 21, May 1972 (1972-05-01), ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM., NL, pages 2157 - 2160, XP002121393, ISSN: 0040-4039
- [X] J. R. BULL ET AL: "Hydroxylation of delta-4 Steroids by Osmium Tetroxide; Stereochemistry and Substituent Effects", JOURNAL OF THE CHEMICAL SOCIETY, PERKIN TRANSACTIONS 1., no. 7, 1977, CHEMICAL SOCIETY. LETCHWORTH., GB, pages 724 - 730, XP002121394, ISSN: 0300-922X
- [X] A. M. PONOMAREV ET AL, JOURNAL OF ORGANIC CHEMISTRY OF THE USSR. (ZHURNAL ORGANICHESKOI KHIMII), vol. 7, 1971, CONSULTANTS BUREAU. NEW YORK., US, pages 1477 - 1479, XP002121397
- [X] A. N. CHERKASOV ET AL, JOURNAL OF ORGANIC CHEMISTRY OF THE USSR. (ZHURNAL ORGANICHESKOI KHIMII), vol. 7, 1971, CONSULTANTS BUREAU. NEW YORK., US, pages 955 - 961, XP002121398
- See references of WO 9610032A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 9610032 A1 19960404; AU 3733195 A 19960419; AU 705422 B2 19990520; BR 9509098 A 19980714; CA 2199044 A1 19960404; CN 1167489 A 19971210; CZ 92697 A3 19970917; EP 0783513 A1 19970716; EP 0783513 A4 20000308; EP 0924219 A2 19990623; EP 0924219 A3 20020123; FI 971315 A0 19970327; FI 971315 A 19970327; HU T76856 A 19971229; JP H10509423 A 19980914; KR 970706297 A 19971103; MX 9702253 A 19970628; NO 971417 D0 19970325; NO 971417 L 19970523; NZ 294510 A 19990429; PL 319601 A1 19970818; RU 2160279 C2 20001210

DOCDB simple family (application)

US 9512542 W 19950929; AU 3733195 A 19950929; BR 9509098 A 19950929; CA 2199044 A 19950929; CN 95196518 A 19950929; CZ 92697 A 19950929; EP 95935237 A 19950929; EP 98203950 A 19950929; FI 971315 A 19970327; HU 9701508 A 19950929; JP 51206795 A 19950929; KR 19970702034 A 19970328; MX 9702253 A 19950929; NO 971417 A 19970325; NZ 29451095 A 19950929; PL 31960195 A 19950929; RU 97107609 A 19950929