

Title (en)

METHODS FOR TREATING NEURODEGENERATIVE DISORDERS USING ASPARTYL PROTEASE INHIBITORS

Title (de)

Verfahren zur Behandlung von Neurodegenerativen Störungen unter Verwendung der Inhibitoren von Aspartyl-Protease

Title (fr)

TRAITEMENT DES MALADIES NEURODEGENERATIVES PAR DES INHIBITEURS DE L'ASPARTYL PROTEASE

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Application

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Abstract (en)

[origin: WO0056335A1] The present invention relates to (i) non-peptide aspartyl protease inhibitors; (ii) methods for modulating the processing of an amyloid precursor protein (APP); (iii) methods for modulating the processing of a tau protein (tau-protein); and (iv) methods for treating neurodegenerative diseases.

IPC 1-7

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IPC 8 full level

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Citation (search report)

- [XY] WO 9833795 A1 19980806 - UNIV CALIFORNIA [US], et al
- [Y] CATALDO A M ET AL: "ENZYMATICALLY ACTIVE LYSOSOMAL PROTEASES ARE ASSOCIATED WITH AMYLOID DEPOSITS IN ALZHEIMER BRAIN", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 87, no. 10, 1 May 1990 (1990-05-01), pages 3861 - 3865, XP000602294, ISSN: 0027-8424
- [Y] CATALDO A M ET AL: "LYSOSOMAL HYDROLASES OF DIFFERENT CLASSES ARE ABNORMALLY DISTRIBUTED IN BRAINS OF PATIENTS WITH ALZHEIMER DISEASE", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 88, December 1991 (1991-12-01), pages 10998 - 11002, XP002929850, ISSN: 0027-8424
- [Y] CATALDO A M ET AL: "LYSOSOMAL PROTEINASE ANTIGENS ARE PROMINENTLY LOCALIZED WITHIN SENILE PLAQUES OF ALZHEIMER'S DISEASE EVIDENCE FOR A NEURONAL ORIGIN", BRAIN RESEARCH, vol. 513, no. 2, 1990, pages 181 - 192, XP001070394, ISSN: 0006-8993
- [Y] KENESSEY AGNES ET AL: "Degradation of tau by lysosomal enzyme cathepsin D: Implication for Alzheimer neurofibrillary degeneration.", JOURNAL OF NEUROCHEMISTRY, vol. 69, no. 5, 1997, pages 2026 - 2038, XP001069801, ISSN: 0022-3042
- [Y] LI K ET AL: "ABNORMAL DISTRIBUTION OF CATHEPSIN PROTEINASES AND ENDOGENOUS INHIBITORS (CYSTATINS) IN THE HIPPOCAMPUS OF PATIENTS WITH ALZHEIMER'S DISEASE, PARKINSONISM-DEMENTIA COMPLEX ON GUAM, AND SENILE DEMENTIA AND IN THE AGED", VIRCHOWS ARCHIV A. PATHOLOGICAL ANATOMY AND HISTOPATHOLOGY, SPRINGER VERLAG, BERLIN, DE, vol. 423, no. 3, 1 September 1993 (1993-09-01), pages 185 - 194, XP002062087, ISSN: 0174-7398
- [Y] KREUTZBERG G W: "Microglia, the first line of defence in brain pathologies.", ARZNEIMITTEL-FORSCHUNG, vol. 45, no. 3A, 1995, pages 357 - 360, XP001068957, ISSN: 0004-4172
- [Y] CATALDO ANNE M ET AL: "Colocalization of lysosomal hydrolase and beta-amyloid in diffuse plaques of the cerebellum and striatum in Alzheimer's disease and Down's syndrome.", JOURNAL OF NEUROPATHOLOGY & EXPERIMENTAL NEUROLOGY, vol. 55, no. 6, 1996, pages 704 - 715, XP001070366, ISSN: 0022-3069
- [DX] HAQUE, TASIR S. ET AL: "Potent, Low-Molecular-Weight Non-Peptide Inhibitors of Malarial Aspartyl Protease Plasmeprin II", J. MED. CHEM. (1999), 42(8), 1428-1440, XP000926504
- [DX] LEE, CHRISTINA E. ET AL: "General solid-phase synthesis approach to prepare mechanism-based aspartyl protease inhibitor libraries. Identification of potent cathepsin D inhibitors", J. AM. CHEM. SOC. (1998), 120(38), 9735-9747, XP002197748
- See references of WO 0056335A1

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