

Title (en)
INTERLEUKIN CONVERTING ENZYME AND APOPTOSIS

Title (de)
INTERLEUKIN-KONVERTIERENDES ENZYM UND APOPTOSIS

Title (fr)
ENZYME DE CONVERSION D'INTERLEUKINE ET APOPTOSE

Publication
EP 0859779 A4 20000412 (EN)

Application
EP 96932941 A 19960829

Priority
• US 9613967 W 19960829
• US 308295 P 19950831

Abstract (en)
[origin: WO9708174A1] The present invention is to the novel compounds of Formula (I), their pharmaceutical compositions, and to the novel inhibition of ICE and ICE-like proteins for use in the treatment of apoptosis, and disease states caused by excessive or inappropriate cell death.

IPC 1-7
C07D 501/00; A61K 31/545

IPC 8 full level
A61K 31/00 (2006.01); **A61K 31/545** (2006.01); **A61K 31/546** (2006.01); **A61P 1/00** (2006.01); **A61P 1/16** (2006.01); **A61P 9/00** (2006.01); **A61P 9/10** (2006.01); **A61P 19/00** (2006.01); **A61P 19/02** (2006.01); **A61P 19/08** (2006.01); **A61P 25/28** (2006.01); **A61P 31/00** (2006.01); **A61P 31/12** (2006.01); **A61P 43/00** (2006.01); **C07D 501/00** (2006.01)

CPC (source: EP)
A61P 1/00 (2017.12); **A61P 1/16** (2017.12); **A61P 9/00** (2017.12); **A61P 9/10** (2017.12); **A61P 19/00** (2017.12); **A61P 19/02** (2017.12); **A61P 19/08** (2017.12); **A61P 25/28** (2017.12); **A61P 31/00** (2017.12); **A61P 31/12** (2017.12); **A61P 43/00** (2017.12); **C07D 501/00** (2013.01)

Citation (search report)

- [X] EP 0124081 A2 19841107 - MERCK & CO INC [US]
- [X] EP 0267723 A2 19880518 - MERCK & CO INC [US]
- [X] EP 0411929 A1 19910206 - MERCK & CO INC [US]
- [X] WO 8910926 A1 19891116 - ERBA CARLO SPA [IT]
- [X] WO 9104977 A1 19910418 - SYNPHAR LAB INC [CA]
- [X] WO 9428003 A1 19941208 - ERBA CARLO SPA [IT], et al
- [X] WO 9502603 A2 19950126 - PHARMACIA SPA [IT], et al
- [X] DE 4341332 A1 19940609 - ERBA CARLO SPA [IT]
- [X] GB 2266526 A 19931103 - MERCK & CO INC [US]
- [X] GB 2266525 A 19931103 - MERCK & CO INC [US]
- [X] P E FINKE ET AL: "Inhibition of Human Leukocyte Elastase. 4. Selection of a Substituted Cephalosporin (L-658,758) as a Topical Aerosol", JOURNAL OF MEDICINAL CHEMISTRY,US,AMERICAN CHEMICAL SOCIETY. WASHINGTON, vol. 35, 1992, pages 3731 - 3744, XP002077983, ISSN: 0022-2623
- [X] M. ALPEGIANI ET AL., JOURNAL OF MEDICINAL CHEMISTRY, vol. 37, 1994, WASHINGTON US, pages 4003 - 4019, XP002077984
- [X] SALYI, SZABOLCS ET AL: "An improved stereospecific preparation of 7.alpha.- alkoxycephalosporins", SYNTH. COMMUN. (1996), 26(3), 445-52, XP002126770
- [X] ALPEGIANI, MARCO ET AL: "Studies on cephem sulfones as mechanism-based inactivators of human leukocyte elastase. III. Reactions ensuing from chemical.beta.-lactam cleavage", BIOORG. MED. CHEM. LETT. (1993), 3(11), 2259-64, XP002126771
- [X] RIZZO, VINCENZO ET AL: "Studies on cephem sulfones as mechanism-based inactivators of human leukocyte elastase. IV. Reactions ensuing from enzymic.beta.-lactam cleavage", BIOORG. MED. CHEM. LETT. (1993), 3(11), 2265-70, XP002126772
- [X] APLIN, ROBIN T. ET AL: "An investigation into the mechanism of elastase inhibition by cephalosporins using electrospray ionization mass spectrometry", TETRAHEDRON (1993), 49(47), 10903-12, XP002126773
- [X] ALPEGIANI, M. ET AL: "Synthesis and evaluation of new elastase inhibitors. I. 1,1-Dioxocephem-4-[carboxylic acid] thiol esters", EUR. J. MED. CHEM. (1992), 27(9), 875-90, XP000857084
- [X] BORGHI, DANIELA ET AL: "Ring conformation and proton NMR spectra of cephem sulfones. Origin and diagnostic value of the H-6, H-2.alpha. long-range coupling", GAZZ. CHIM. ITAL. (1991), 121(5), 273-5, XP002126775
- [X] ALPEGIANI, MARCO ET AL: "Unexpected reaction between DCC and cephalosporanic acid sulphones", HETEROCYCLES (1990), 31(1), 139-47, XP002126776
- [X] SHAH, SHRENIK K. ET AL: "Inhibition of human leukocyte elastase. 3. Synthesis and activity of 3'-substituted cephalosporins", J. MED. CHEM. (1990), 33(9), 2529-35, XP000857087
- [X] FINKE, PAUL E. ET AL: "Inhibition of human leukocyte elastase. 2. Inhibition by substituted cephalosporin esters and amides", J. MED. CHEM. (1990), 33(9), 2522-8, XP000857086
- [X] DOHERTY, JAMES B. ET AL: "Inhibition of human leukocyte elastase. 1. Inhibition by C-7-substituted cephalosporin tert-butyl esters", J. MED. CHEM. (1990), 33(9), 2513-21, XP000857085
- [X] HAGMANN, WILLIAM K. ET AL: "Inhibition of human leukocyte elastase by C-2 substituted cephalosporin sulfones", EUR. J. MED. CHEM. (1989), 24(6), 599-604, XP000651452
- [X] BLACKLOCK, THOMAS J. ET AL: "A versatile synthesis of 1,1-dioxo 7-substituted cepheims: preparation of the human leukocyte elastase (HLE) inhibitor 1,1-dioxo-trans-7-methoxycephalosporanic acid tert-butyl ester", J. ORG. CHEM. (1989), 54(16), 3907-13, XP002126781
- [X] DOHERTY, JAMES B. ET AL: "Cephalosporin antibiotics can be modified to inhibit human leukocyte elastase", NATURE (LONDON) (1986), 322(6075), 192-4, XP002126782
- See references of WO 9708174A1

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)
WO 9708174 A1 19970306; EP 0859779 A1 19980826; EP 0859779 A4 20000412; JP H11511463 A 19991005

DOCDB simple family (application)

US 9613967 W 19960829; EP 96932941 A 19960829; JP 51059097 A 19960829