

Title (en)

N-HYDROXY-2-(ALKYL, ARYL, OR HETEROARYL SULFANYL, SULFINYL OR SULFONYL)-3-SUBSTITUTED-ALKYL, ARYL OR HETEROARYLAMIDES AS MATRIX METALLOPROTEINASE INHIBITORS

Title (de)

N-HYDROXY-2-(ALKYL, ARYL, ODER HETEROAPYL, SULFANYL, SULFINYL ODER SULFONYL)-3-SUBSTITUIERTE-ALKYL, ARYL ODER HETEROARYLAMIDE, ALS INHIBITOREN DER MATRIXMETALLOPROEINASE

Title (fr)

ALKYLE, ARYLE OU HETEROARYLAMIDES N-HYDROXY-2-(ALKYL, ARYL OU HETEROARYL SULFANYL, SULFINYL OU SULFONYL)-3-SUBSTITUES EN TANT QU'INHIBITEURS DE LA METALLOPROTEINASE MATRICIELLE

Publication

EP 1054858 A1 20001129 (EN)

Application

EP 98943392 A 19980826

Priority

- US 9817633 W 19980826
- US 2637298 A 19980219

Abstract (en)

[origin: WO9942436A1] Matrix metalloproteinases (MMPs) are a group of enzymes that have been implicated in the pathological destruction of connective tissue and basement membranes. These zinc containing endopeptidases consist of several subsets of enzymes including collagenases, stromelysins and gelatinases. TNF- alpha converting enzyme (TACE), a pro-inflammatory cytokine, catalyzes the formation of TNF- alpha from membrane bound TNF- alpha precursor protein. It is expected that small molecule inhibitors of MMPs and TACE therefore have the potential for treating a variety of disease states. The present invention provides low molecular weight, non-peptide inhibitors of matrix metalloproteinases (MMPs) and TNF- alpha converting enzyme (TACE) for the treatment of arthritis, tumor metastasis, tissue ulceration, abnormal wound healing, periodontal disease, bone disease, diabetes (insulin resistance) and HIV infection having formula (I), wherein R<2> and R<3> form a heterocyclic ring and A is S, S(O), or S(O)2 and R<1> and R<4> are defined herein.

IPC 1-7

C07C 239/14; C07D 211/20; C07D 241/04; A61K 31/16

IPC 8 full level

A61K 31/16 (2006.01); **A61K 31/351** (2006.01); **A61K 31/381** (2006.01); **A61K 31/403** (2006.01); **A61K 31/405** (2006.01);
C07D 295/08 (2006.01); **A61K 31/423** (2006.01); **A61K 31/426** (2006.01); **A61K 31/428** (2006.01); **A61K 31/4406** (2006.01);
A61K 31/4418 (2006.01); **A61K 31/4427** (2006.01); **A61K 31/4433** (2006.01); **A61K 31/4436** (2006.01); **A61K 31/445** (2006.01);
A61K 31/4453 (2006.01); **A61K 31/4458** (2006.01); **A61K 31/4535** (2006.01); **A61K 31/454** (2006.01); **A61K 31/4545** (2006.01);
A61K 31/47 (2006.01); **A61K 31/5375** (2006.01); **A61K 31/5377** (2006.01); **A61K 31/55** (2006.01); **A61P 1/02** (2006.01); **A61P 1/04** (2006.01);
A61P 1/16 (2006.01); **A61P 7/02** (2006.01); **A61P 9/00** (2006.01); **A61P 9/10** (2006.01); **A61P 13/12** (2006.01); **A61P 15/06** (2006.01);
A61P 17/00 (2006.01); **A61P 17/02** (2006.01); **A61P 19/02** (2006.01); **A61P 19/08** (2006.01); **A61P 27/02** (2006.01); **A61P 29/00** (2006.01);
A61P 35/00 (2006.01); **A61P 35/04** (2006.01); **A61P 43/00** (2006.01); **C07C 259/06** (2006.01); **C07C 317/44** (2006.01); **C07C 323/60** (2006.01);
C07D 207/12 (2006.01); **C07D 209/48** (2006.01); **C07D 211/12** (2006.01); **C07D 211/20** (2006.01); **C07D 211/54** (2006.01);
C07D 211/62 (2006.01); **C07D 211/66** (2006.01); **C07D 213/56** (2006.01); **C07D 215/12** (2006.01); **C07D 223/02** (2006.01);
C07D 241/04 (2006.01); **C07D 263/58** (2006.01); **C07D 277/20** (2006.01); **C07D 277/36** (2006.01); **C07D 277/70** (2006.01);
C07D 295/092 (2006.01); **C07D 307/54** (2006.01); **C07D 309/12** (2006.01); **C07D 333/28** (2006.01); **C07D 333/34** (2006.01);
C07D 401/10 (2006.01); **C07D 409/04** (2006.01); **C07D 409/10** (2006.01)

CPC (source: EP KR)

A61P 1/02 (2018.01 - EP); **A61P 1/04** (2018.01 - EP); **A61P 1/16** (2018.01 - EP); **A61P 3/10** (2018.01 - EP); **A61P 5/10** (2018.01 - EP);
A61P 7/02 (2018.01 - EP); **A61P 9/00** (2018.01 - EP); **A61P 9/10** (2018.01 - EP); **A61P 13/12** (2018.01 - EP); **A61P 15/06** (2018.01 - EP);
A61P 17/00 (2018.01 - EP); **A61P 17/02** (2018.01 - EP); **A61P 19/00** (2018.01 - EP); **A61P 19/02** (2018.01 - EP); **A61P 19/08** (2018.01 - EP);
A61P 27/02 (2018.01 - EP); **A61P 29/00** (2018.01 - EP); **A61P 31/18** (2018.01 - EP); **A61P 35/00** (2018.01 - EP); **A61P 35/04** (2018.01 - EP);
A61P 43/00 (2018.01 - EP); **C07C 239/14** (2013.01 - KR); **C07D 211/20** (2013.01 - EP); **C07D 211/54** (2013.01 - EP);
C07D 211/62 (2013.01 - EP); **C07D 295/088** (2013.01 - EP)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 9942436 A1 19990826; AU 757719 B2 20030306; AU 9120198 A 19990906; BG 104782 A 20010831; BR 9815781 A 20001107;
CA 2320469 A1 19990826; CN 1213021 C 20050803; CN 1291183 A 20010411; EA 003283 B1 20030424; EA 200000849 A1 20010423;
EE P20000471 A 20020215; EP 1054858 A1 20001129; GE P20022797 B 20020925; HR P20000543 A2 20010831; HU P0101837 A2 20011028;
HU P0101837 A3 20011128; ID 25639 A 20001019; IL 137566 A0 20010724; JP 2002503717 A 20020205; KR 20010041089 A 20010515;
NO 20004093 D0 20000816; NO 20004093 L 20001003; NZ 506184 A 20030530; PL 342548 A1 20010618; SK 12332000 A3 20010212;
TR 200002423 T2 20010122

DOCDB simple family (application)

US 9817633 W 19980826; AU 9120198 A 19980826; BG 10478200 A 20000919; BR 9815781 A 19980826; CA 2320469 A 19980826;
CN 98813966 A 19980826; EA 200000849 A 19980826; EE P20000471 A 19980826; EP 98943392 A 19980826;
GE AP1998005554 A 19980826; HR P20000543 A 20000818; HU P0101837 A 19980826; ID 20001549 A 19980826; IL 13756698 A 19980826;
JP 2000532389 A 19980826; KR 20007009128 A 20000818; NO 20004093 A 20000816; NZ 50618498 A 19980826; PL 34254898 A 19980826;
SK 12332000 A 19980826; TR 200002423 T 19980826