

Title (en)
INHIBITION OF ANGIOGENESIS AND TUMOR GROWTH

Title (de)
HEMMUNG DER ANGIOGENESE UND DES TUMORWACHSTUMS

Title (fr)
INHIBITION DE L'ANGIOGENESE ET DE LA CROISSANCE TUMORALE

Publication
EP 1276713 A4 20060503 (EN)

Application
EP 01924359 A 20010327

Priority
• US 0109756 W 20010327
• US 19226000 P 20000327

Abstract (en)
[origin: WO0172297A1] Angiogenesis, tumor growth, and metalloproteinase 2 (MMP2) interaction with integrin- alpha v beta 3 are inhibited by an inhibitor compound of formula (I): wherein G<1> and G<2> are each independently NH-C(O)-O-R<1>, -NH-C(O)-O-(CH2)v-(C6H4)-X<3>, -NH-C(O)-NH-(CH2)v-(C6H4)-X<3>, -O-C(O)-NH-(CH2)v-(C6H4)-X<3>, -O-C(O)-O-(CH2)v-(C6H4)-X<3>, or NH-C(O)-CH2-(C6H4)-X<3>; Y<1> and Y<2> are each independently OH, C1-C4 alkyl, C1-C4 hydroxyalkyl, C1-C4 alkoxy, phenyl, benzyl, or NH2; R<1> is C1-C4 alkyl; X<1> and X<2> are each independently halo or C1-C4 alkoxy; X<3> is halo, nitro, C1-C4 alkyl, C1-C4 alkoxy, or C1-C4 perfluoroalkyl; Z is -CC-, -C6H4-, cis-CH=CH-, trans-CH=CH-, cis-CH2-CH=CH-CH2-, trans-CH2-CH=CH-CH2-, 1,4-naphthyl, cis-1, 3-cyclohexyl, trans-1, 3-cyclohexyl, cis-1, 4-cyclohexyl, or trans-1,4-cyclohexyl; A is H or a covalent bond; m and n are each independently an integer having a value of 0 or 1; t is an integer having a value of 0 or 1; and p, r, and v are each independently an integer having a value of 1 or 2; with provisos that when A is H, t is O; when A is a covalent bond, t is 1; when m is 0, Y<1> is C1-C4 hydroxyalkyl; and when n is 0, Y<2> is C1 C4 hydroxyalkyl.

IPC 1-7
C07C 261/00; A61K 38/00

IPC 8 full level
A61K 31/165 (2006.01); **A61K 31/166** (2006.01); **A61K 38/55** (2006.01); **A61K 31/192** (2006.01); **A61K 31/216** (2006.01); **A61P 29/00** (2006.01); **A61P 35/00** (2006.01); **A61P 43/00** (2006.01); **C07C 237/22** (2006.01); **C07C 271/22** (2006.01)

CPC (source: EP KR)
A61K 31/16 (2013.01 - KR); **A61K 31/165** (2013.01 - EP); **A61K 31/192** (2013.01 - EP); **A61K 31/216** (2013.01 - EP); **A61P 9/00** (2018.01 - EP); **A61P 9/14** (2018.01 - EP); **A61P 29/00** (2018.01 - EP); **A61P 35/00** (2018.01 - EP); **A61P 43/00** (2018.01 - EP)

Citation (search report)
• [X] WO 9835231 A1 19980813 - SCRIPPS RESEARCH INST [US], et al & DATABASE CAPLUS CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; XP002369179, retrieved from STN accession no. 1998:550559 Database accession no. 129:189127
• [A] US 4511504 A 19850416 - MCCULLAGH KEITH G [GB], et al
• [A] WO 9425435 A1 19941110 - CELLTECH LTD [GB], et al
• [PX] BOGER D L ET AL: "Identification of a novel class of small-molecule antiangiogenic agents through the screening of combinatorial libraries which function by inhibiting the binding and localization of proteinase MMP2 to integrin.alpha.V.beta.3", JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, DC, US, vol. 123, no. 7, 2001, pages 1280 - 1288, XP002215423, ISSN: 0002-7863
• [PX] SILLETTI S ET AL: "DISRUPTION OF MATRIX METALLOPROTEINASE 2 BINDING TO INTEGRIN ALPHAVBETA3 BY AN ORGANIC MOLECULE INHIBITS ANGIOGENESIS AND TUMOR GROWTH IN VIVO", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE, WASHINGTON, DC, US, vol. 98, no. 1, 2 January 2001 (2001-01-02), pages 119 - 124, XP001115022, ISSN: 0027-8424
• [X] BOGER D L ET AL: "Higher order iminodiacetic acid libraries for probing protein-protein interactions.", BIOORGANIC & MEDICINAL CHEMISTRY, AUG 1998, vol. 6, no. 8, August 1998 (1998-08-01), pages 1347 - 1378, XP002369171, ISSN: 0968-0896
• See also references of WO 0172699A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0172297 A1 20011004; AU 2001249499 B2 20050421; AU 2001251018 B2 20051201; AU 4949901 A 20011008; AU 5101801 A 20011008; CA 2403630 A1 20011004; CA 2403630 C 20090526; CA 2403871 A1 20011004; CA 2403871 C 20100511; CA 2659030 A1 20011004; CN 1229339 C 20051130; CN 1245967 C 20060322; CN 1429106 A 20030709; CN 1441777 A 20030910; CZ 20023509 A3 20030618; CZ 20023510 A3 20030312; EP 1272173 A1 20030108; EP 1272173 A4 20060503; EP 1276713 A1 20030122; EP 1276713 A4 20060503; HU P0301621 A2 20030929; HU P0301621 A3 20090629; HU P0301797 A2 20030929; HU P0301797 A3 20100928; JP 2003528140 A 20030924; JP 2003528850 A 20030930; KR 100767616 B1 20071018; KR 100767618 B1 20071116; KR 20020084258 A 20021104; KR 20020091156 A 20021205; MX PA02009504 A 20030521; MX PA02009510 A 20030521; NO 20024576 D0 20020924; NO 20024576 L 20021120; NO 20024578 D0 20020924; NO 20024578 L 20021120; NO 328969 B1 20100628; PL 205134 B1 20100331; PL 358272 A1 20040809; PL 366316 A1 20050124; RU 2002128751 A 20040310; RU 2269339 C2 20060210; RU 2276133 C2 20060510; SK 14842002 A3 20030401; SK 14852002 A3 20030603; WO 0172699 A1 20011004; ZA 200208626 B 20040216; ZA 200208628 B 20040212

DOCDB simple family (application)
US 0109785 W 20010327; AU 2001249499 A 20010327; AU 2001251018 A 20010327; AU 4949901 A 20010327; AU 5101801 A 20010327; CA 2403630 A 20010327; CA 2403871 A 20010327; CA 2659030 A 20010327; CN 01809743 A 20010327; CN 01809744 A 20010327; CZ 20023509 A 20010327; CZ 20023510 A 20010327; EP 01922734 A 20010327; EP 01924359 A 20010327; HU P0301621 A 20010327; HU P0301797 A 20010327; JP 2001570258 A 20010327; JP 2001570612 A 20010327; KR 20027012720 A 20020926; KR 20027012724 A 20020926; MX PA02009504 A 20010327; MX PA02009510 A 20010327; NO 20024576 A 20020924; NO 20024578 A 20020924; PL 35827201 A 20010327; PL 36631601 A 20010327; RU 2002128736 A 20010327; RU 2002128751 A 20010327; SK 14842002 A 20010327; SK 14852002 A 20010327; US 0109756 W 20010327; ZA 200208626 A 20021024; ZA 200208628 A 20021024