

Title (en)
POLYPEPTIDES AND BIOSYNTHETIC PATHWAYS FOR THE PRODUCTION OF STEREOISOMERS OF MONATIN AND THEIR PRECURSORS

Title (de)
POLYPEPTIDE UND BIOSYNTHESEWEGE ZUR HERSTELLUNG VON STEREOISOMEREN VON MONATIN UND DEREN VORLÄUFERN

Title (fr)
POLYPEPTIDES ET VOIES DE SYNTHÈSE BIOLOGIQUE DESTINÉES À PRODUIRE DES STEREOISOMÈRES DE MONATINE ET LEURS PRÉCURSEURS

Publication
EP 1883697 A4 20100505 (EN)

Application
EP 06751574 A 20060426

Priority
• US 2006015930 W 20060426
• US 67493205 P 20050426

Abstract (en)
[origin: WO2007133184A2] Monatin and certain stereoisomers of monatin, such as R,R monatin and S,R monatin, as well as salts thereof, are produced using polypeptides and biosynthetic pathways. These polypeptides and biosynthetic pathways are also useful in the production of R-2-hydroxy-2-(indolyl-3-ylmethyl)-4-keto glutaric acid, an intermediate that is formed in certain monatin synthesis pathways, including some biosynthetic pathways.

IPC 8 full level
C07H 21/04 (2006.01); **C12N 9/10** (2006.01); **C12P 13/22** (2006.01)

CPC (source: EP)
C12N 9/1096 (2013.01); **C12N 9/90** (2013.01); **C12P 17/10** (2013.01)

Citation (search report)
• [X] WO 2005020721 A1 20050310 - CARGILL INC [US], et al
• [X] WO 2005016022 A1 20050224 - CARGILL INC [US], et al
• [XD] WO 03091396 A2 20031106 - CARGILL INC [US]
• [X] WO 2005001105 A1 20050106 - AJINOMOTO KK [JP], et al
• [X] DATABASE CA [online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; 12 August 2004 (2004-08-12), SUGIYAMA, MASAKAZU ET AL: "2R-monatin manufacture by enzymic resolution", XP002526346, retrieved from STN Database accession no. 141:172983
• [A] KOSHIBA T ET AL: "L- AND D-TRYPTOPHAN AMINOTRANSFERASES FROM MAIZE COLEOPTILES", JOURNAL OF PLANT RESEARCH, TOKYO, JP, vol. 106, no. 1081, 1 January 1993 (1993-01-01), pages 25 - 29, XP008020474, ISSN: 0918-9440
• [T] "EC 2.6.1.27 - tryptophan transaminase", BRENDA THE COMPREHENSIVE ENZYME INFORMATION SYSTEM, 2009, XP002526345, Retrieved from the Internet <URL:http://www.brenda-enzymes.org/php/result_flat.php4?ecno=2.6.1.27> [retrieved on 20090429] & JP 2004222657 A 20040812 - AJINOMOTO KK & US 2006154343 A1 20060713 - MORI KEN-ICHI [JP], et al
• See references of WO 2007133184A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007133184 A2 20071122; WO 2007133184 A3 20080828; AU 2006341528 A1 20071206; AU 2006341528 A8 20090108; BR PI0609876 A2 20100511; CA 2638896 A1 20071122; CA 2638896 C 20150127; CN 101365787 A 20090211; CN 101365787 B 20140305; EP 1883697 A2 20080206; EP 1883697 A4 20100505; EP 2361976 A2 20110831; EP 2361976 A3 20120801; EP 2361976 B1 20160525; EP 3168299 A2 20170517; EP 3168299 A3 20170705; ES 2587572 T3 20161025; JP 2008538932 A 20081113; JP 5336182 B2 20131106

DOCDB simple family (application)
US 2006015930 W 20060426; AU 2006341528 A 20060426; BR PI0609876 A 20060426; CA 2638896 A 20060426; CN 200680022628 A 20060426; EP 06751574 A 20060426; EP 11000670 A 20060426; EP 16001105 A 20060426; ES 11000670 T 20060426; JP 2008515698 A 20060426