

Title (en)
SITE-DIRECTED MODIFICATION OF FACTOR IX

Title (de)
ORTSGERICHTETE MODIFIZIERUNG VON FAKTOR IX

Title (fr)
MODIFICATION DE FACTEUR IX ORIENTÉE SITE

Publication
EP 2282767 A4 20120711 (EN)

Application
EP 09747101 A 20090415

Priority
• US 2009040691 W 20090415
• US 12456808 P 20080416

Abstract (en)
[origin: WO2009140015A2] The invention relates to modified Factor IX polypeptides such as Factor IX polypeptides with one or more introduced cysteine sites. The modified Factor IX polypeptides may be conjugated to a biocompatible polymer. The invention also relates to methods of making modified Factor IX polypeptides, and methods of using modified Factor IX polypeptides, for example, to treat patients afflicted with hemophilia B.

IPC 8 full level
A61K 38/48 (2006.01); **C12N 9/64** (2006.01)

CPC (source: EP)
A61K 47/60 (2017.07); **A61P 7/04** (2017.12); **C12N 9/644** (2013.01); **C12Y 304/21022** (2013.01); **A61K 38/00** (2013.01)

Citation (search report)
• [YD] WO 2007135182 A2 20071129 - NOVO NORDISK HEALTHCARE AG [CH], et al
• [Y] CHANG J ET AL: "Changing residue 338 in human factor IX from arginine to alanine causes an increase in catalytic activity", JOURNAL OF BIOLOGICAL CHEMISTRY, THE AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, INC, US, vol. 273, no. 20, 15 May 1998 (1998-05-15), pages 12089 - 12094, XP002464802, ISSN: 0021-9258, DOI: 10.1074/JBC.273.20.12089
• [YD] CHANG YU-JIA ET AL: "Identification of functionally important residues of the epidermal growth factor-2 domain of factor IX by alanine-scanning mutagenesis. Residues Asn(89)-Gly(93) are critical for binding factor VIIIa", JOURNAL OF BIOLOGICAL CHEMISTRY, THE AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, INC, US, vol. 277, no. 28, 12 July 2002 (2002-07-12), pages 25393 - 25399, XP002464800, ISSN: 0021-9258, DOI: 10.1074/JBC.M105432200
• See references of WO 2009140015A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2009140015 A2 20091119; WO 2009140015 A3 20100107; CA 2721362 A1 20091119; CN 102065887 A 20110518; EP 2282767 A2 20110216; EP 2282767 A4 20120711; JP 2011517950 A 20110623; KR 20110015551 A 20110216

DOCDB simple family (application)
US 2009040691 W 20090415; CA 2721362 A 20090415; CN 200980122785 A 20090415; EP 09747101 A 20090415; JP 2011505176 A 20090415; KR 20107025563 A 20090415