Title (en)

CLONING AND PRODUCTION OF POLYPEPTIDE ANALOGS OF HUMAN FIBRONECTIN AND METHOD OF USING SUCH POLYPEPTIDE ANALOGS

Publication

EP 0451211 A4 19920909 (EN)

Application

EP 90902086 A 19891229

Priority

- US 29195188 A 19881229
- US 34595289 A 19890428

Abstract (en)

[origin: WO9007577A1] This invention provides plasmids for bacterial expression of polypeptides which comprise a substantial portion of the amino acid sequence of, and which have the biological activity of, one of the domains of naturally-occurring human fibronectin, such as the cell binding domain or fibrin binding domain, comprising DNA encoding the polypeptide and DNA encoding suitable regulatory elements positioned relative to the DNA encoding the polypeptide so as to effect expression of the polypeptide in a suitable host cell. In the presently preferred embodiments of the invention, the polypeptide is a 75 kD, 40 kD or 33 kD polypeptide of the cell binding domain, or a 31 kD or 20 kD polypeptide of the fibrin binding domain. The invention also provides methods for producing the polypeptides and pharmaceutical compositions comprising the polypeptides and pharmaceutically acceptable carriers. The polypeptides of this invention may be used to inhibit platelet aggregation, to inhibit thromboxane release from platelets, or to treat a subject with a cerebrovascular disorder, a cardiovascular disorder, a wound, a bacterial infection, a cancer, or to detect a fibrin thrombi. The invention further provides the polypeptides conjugated to thrombolytic agents, growth factors, serum albumin, blood factors, or polyethyleneglycol.

IPC 1-7

C12N 15/12; C12N 15/70; C12P 21/02

IPC 8 full level

A61K 38/00 (2006.01); **A61K 49/00** (2006.01); **A61M 25/00** (2006.01); **A61P 7/02** (2006.01); **A61P 9/08** (2006.01); **A61P 9/10** (2006.01); **A61P 17/00** (2006.01); **A61P 31/04** (2006.01); **A61P 35/00** (2006.01); **C07K 14/00** (2006.01); **C07K 14/505** (2006.01); **C07K 14/52** (2006.01); **C07K 14/525** (2006.01); **C07K 14/53** (2006.01); **C07K 14/535** (2006.01); **C07K 14/54** (2006.01); **C07K 14/555** (2006.01); **C07K 14/745** (2006.01); **C07K 14/755** (2006.01); **C07K 14/76** (2006.01); **C07K 14/78** (2006.01); **C07K 19/00** (2006.01); **C12N 1/21** (2006.01); **C12N 15/09** (2006.01); **C12N 15/12** (2006.01); **C12P 21/02** (2006.01); **G01N 33/53** (2006.01); C12R 1/19 (2006.01)

CPC (source: EP KR)

A61K 49/0002 (2013.01 - EP); **A61K 49/0004** (2013.01 - EP); **A61K 49/0008** (2013.01 - EP); **A61M 25/0045** (2013.01 - EP); **A61P 7/02** (2017.12 - EP); **A61P 9/08** (2017.12 - EP); **A61P 9/10** (2017.12 - EP); **A61P 17/00** (2017.12 - EP); **A61P 31/04** (2017.12 - EP); **A61P 35/00** (2017.12 - EP); **C07K 14/78** (2013.01 - EP); **C07K 19/00** (2013.01 - EP); **C12N 15/11** (2013.01 - KR); A61K 38/00 (2013.01 - EP); A61K 2123/00 (2013.01 - EP)

Citation (search report)

- [X] EP 0207751 B1 19901114
- [X] THE JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 258, no. 5, 10th March 1983, pages 3332-3340, Baltimore, US; M. HAYASHI et al.: "Domain structure of the carboxyl-terminal half of human plasma"
- [X] PROC. NATL. ACAD. SCI. USA, vol. 80, January 1983, pages 137-141; T.E. PETERSEN et al.: "Partial primary structure of bovine plasma fibronectin: Three types of internal homology"
- See references of WO 9007577A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

WO 9007577 A1 19900712; AU 4959890 A 19900801; AU 636596 B2 19930506; CA 2006929 A1 19900629; CA 2006929 C 20051018; DK 128091 A 19910829; DK 128091 D0 19910628; DK 5693 A 19930118; DK 5693 D0 19930118; EP 0451211 A1 19911016; EP 0451211 A4 19920909; IL 92925 A0 19900917; JP 3095771 B2 20001010; JP H04505698 A 19921008; KR 910700339 A 19910314

DOCDB simple family (application)

US 8905875 W 19891229; AU 4959890 A 19891229; CA 2006929 A 19891229; DK 128091 A 19910628; DK 5693 A 19930118; EP 90902086 A 19891229; IL 9292589 A 19891229; JP 50280490 A 19891229; KR 900701929 A 19900829