

Title (en)

EXPRESSION OF FUNCTIONAL EUKARYOTIC PROTEINS

Title (de)

DURCH DIREKTE EVOLUTION IN FUNKTIONELLER FORM EXPRIMIERBARE EUKARYONTISCHE PROTEIN VARIANTEN IN E.COLI

Title (fr)

EXPRESSION DE PROTEINES EUKARYOTES FONCTIONNELLES

Publication

**EP 1100891 A2 20010523 (EN)**

Application

**EP 99935983 A 19990728**

Priority

- US 9917127 W 19990728
- US 9440398 P 19980728
- US 24723299 A 19990209

Abstract (en)

[origin: WO0006718A2] This invention relates to the improved expression of evolved polynucleotide and polypeptide sequences encoding for eukaryotic enzymes, particularly peroxidase enzymes, in conventional or facile expression systems. Various methods for directed evolution of polynucleotide sequences can be used to obtain the improved sequences. The improved characteristics of the polypeptides or proteins generated in this manner include improved folding, without formation of inclusion bodies, and retained functional activity. In a particular embodiment, the invention relates to improved expression of the horseradish peroxidase gene and horseradish peroxidase enzymes.

IPC 1-7

**C12N 15/10; C12N 15/67; C12N 15/53; C12N 15/70; C12N 15/81; C12N 9/08**

IPC 8 full level

**C12N 15/09** (2006.01); **C12N 1/19** (2006.01); **C12N 1/21** (2006.01); **C12N 9/08** (2006.01); **C12N 15/10** (2006.01); **C12N 15/67** (2006.01); **C12N 15/81** (2006.01); **C12Q 1/26** (2006.01); **C12Q 1/28** (2006.01); **C12R 1/19** (2006.01); **C12R 1/865** (2006.01)

CPC (source: EP KR)

**C12N 9/0065** (2013.01 - EP); **C12N 15/00** (2013.01 - KR); **C12N 15/102** (2013.01 - EP); **C12N 15/1058** (2013.01 - EP); **C12N 15/67** (2013.01 - EP); **C12N 15/815** (2013.01 - EP); **C12Q 1/26** (2013.01 - EP); **C12Q 1/28** (2013.01 - EP); **C07K 2319/02** (2013.01 - EP); **G01N 2333/795** (2013.01 - EP); **G01N 2333/80** (2013.01 - EP); **G01N 2333/90245** (2013.01 - EP)

Citation (search report)

See references of WO 0006718A2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 0006718 A2 20000210; WO 0006718 A3 20000615**; AU 5134599 A 20000221; CA 2331777 A1 20000210; EP 1100891 A2 20010523; IL 140509 A0 20020210; JP 2003503005 A 20030128; KR 20010083086 A 20010831; MX PA01000224 A 20021017

DOCDB simple family (application)

**US 9917127 W 19990728**; AU 5134599 A 19990728; CA 2331777 A 19990728; EP 99935983 A 19990728; IL 14050999 A 19990728; JP 2000562500 A 19990728; KR 20017000036 A 20010102; MX PA01000224 A 19990728