

Title (en)

COMPOSITIONS AND METHODS FOR RECOMBINATIONAL CLONING OF NUCLEIC ACID MOLECULES

Title (de)

ZUSAMMENSETZNGEN UND VERFAHREN ZUR REKOMBINATORISCHEN KLONIERUNF VON NUKLEINSÄURE MOLEKÜLEN

Title (fr)

COMPOSITIONS ET METHODES DE CLONAGE RECOMBINATOIRE DE MOLECULES D'ACIDE NUCLEIQUE

Publication

EP 1131078 A4 20050824 (EN)

Application

EP 99960316 A 19991112

Priority

- US 9926871 W 19991112
- US 10832498 P 19981113

Abstract (en)

[origin: WO0029000A1] The present invention relates generally to compositions and methods for enhancing recombinational cloning of nucleic acid molecules. In particular, the invention relates to compositions comprising one or more ribosomal proteins and one or more additional protein components required for recombinational cloning. More particularly, the invention relates to such compositions wherein the ribosomal proteins are one or more E. coli ribosomal proteins, still more particularly wherein the ribosomal proteins are selected from the group of E. coli ribosomal proteins consisting of S10, S14, S15, S16, S17, S18, S19, S20, S21, L20, L21, and L23 through L34, and most particularly S20, L27, and S15. The invention also relates to the use of these compositions in methods for recombinational cloning of nucleic acids, in vitro and in vivo, to provide chimeric DNA molecules that have particular characteristics and/or DNA segments. The invention also relates to isolated nucleic acid molecules produced by the methods of the invention, to vectors comprising such nucleic acid molecules, and to host cells comprising such nucleic acid molecules and vectors.

IPC 1-7

A61K 35/00; C12N 15/00; C12N 9/16; C12N 1/20; C12N 1/00; C07H 21/02

IPC 8 full level

C07K 14/245 (2006.01); **C12N 15/00** (2006.01); **C12N 15/10** (2006.01); **C12N 15/66** (2006.01)

CPC (source: EP)

C07K 14/245 (2013.01); **C12N 15/10** (2013.01); **C12N 15/66** (2013.01)

Citation (search report)

- [PX] US 5888732 A 19990330 - HARTLEY JAMES L [US], et al
- [Y] BUBECK P ET AL: "RAPID CLONING BY HOMOLOGOUS RECOMBINATION IN VIVO", NUCLEIC ACIDS RESEARCH, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 21, no. 15, 1993, pages 3601 - 3602, XP002064300, ISSN: 0305-1048
- [Y] ZHANG Y ET AL: "A new logic for DNA engineering using recombination in Escherichia coli", NATURE GENETICS, NEW YORK, NY, US, vol. 20, no. 2, October 1998 (1998-10-01), pages 123 - 128, XP002103371, ISSN: 1061-4036
- [PX] LIU QINGHUA ET AL: "The univector plasmid-fusion system, a method for rapid construction of recombinant DNA without restriction enzymes", CURRENT BIOLOGY, CURRENT SCIENCE,, GB, vol. 8, no. 24, 3 December 1998 (1998-12-03), pages 1300 - 1309, XP002155212, ISSN: 0960-9822
- [PX] SHASHIKANT C S L ET AL: "Recombinogenic targeting: a new approach to genomic analysis-a review", GENE, ELSEVIER BIOMEDICAL PRESS, AMSTERDAM, NL, vol. 223, no. 1-2, 26 November 1998 (1998-11-26), pages 9 - 20, XP004153573, ISSN: 0378-1119
- [T] HARTLEY JAMES L ET AL: "DNA cloning using in vitro site-specific recombination", GENOME RESEARCH, COLD SPRING HARBOR LABORATORY PRESS, US, vol. 10, no. 11, November 2000 (2000-11-01), pages 1788 - 1795, XP002187669, ISSN: 1088-9051
- See references of WO 0029000A1

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 0029000 A1 20000525; WO 0029000 A9 20001109; AU 1721600 A 20000605; EP 1131078 A1 20010912; EP 1131078 A4 20050824

DOCDB simple family (application)

US 9926871 W 19991112; AU 1721600 A 19991112; EP 99960316 A 19991112