

Title (en)

METHODS AND COMPOSITIONS FOR THE CONSTRUCTION AND USE OF FUSION LIBRARIES

Title (de)

METHODEN UND PRODUKTE FÜR DIE KONSTRUKTION VON FUSIONSPROTEINBIBLIOTHEKEN

Title (fr)

TECHNIQUES ET COMPOSITIONS PERMETTANT DE CONSTRUIRE ET D'UTILISER DES BIBLIOTHEQUES DE FUSION

Publication

**EP 1212411 A2 20020612 (EN)**

Application

**EP 00955779 A 20000818**

Priority

- US 0022906 W 20000818
- US 15000499 P 19990820
- US 20913000 P 20000602

Abstract (en)

[origin: WO0114539A2] The present invention provides libraries of fusion nucleic acids each comprising nucleic acid encoding a nucleic acid modification (NAM) enzyme, and nucleic acid encoding a candidate protein. Also provided is a library of fusion polypeptides comprising a nucleic acid modification (NAM) enzyme and a candidate protein. A library of expression vectors is provided each comprising (i) a fusion nucleic acid comprising a nucleic acid encoding a nucleic acid modification (NAM) enzyme, and nucleic acid encoding a candidate protein, and (ii) an EAS. At least two of the candidate proteins are different. Preferably, the NAM enzyme is a Rep protein. Also preferably, the EAS is greater than 20 nucleotides in length. Similarly, preferred embodiments utilize fusion nucleic acids comprising nucleic acids encoding presentation structures, nucleic acids encoding labels or nucleic acids encoding targeting sequences. The invention also provides libraries of nucleic acid/protein (NAP) conjugates each comprising a fusion polypeptide comprising a NAM enzyme and a candidate protein. The NAP conjugates also comprise an expression vector comprising a fusion nucleic acid comprising a fusion nucleic acid comprising a nucleic acid encoding a NAM enzyme, a nucleic acid encoding a candidate protein, and an enzyme attachment sequence (EAS) that is recognized by the NAM enzyme. The EAS and the NAM enzyme are covalently attached. Libraries of host cells and methods of screening are also provided.

IPC 1-7

**C12N 15/00**

IPC 8 full level

**C07K 19/00** (2006.01); **C12N 5/10** (2006.01); **C12N 9/00** (2006.01); **C12N 15/09** (2006.01); **C12N 15/10** (2006.01); **C12Q 1/02** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP KR)

**C12N 15/10** (2013.01 - KR); **C12N 15/1075** (2013.01 - EP)

Citation (search report)

See references of WO 0114539A2

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 0114539 A2 20010301**; **WO 0114539 A3 20010927**; AU 6792500 A 20010319; AU 781478 B2 20050526; CA 2382483 A1 20010301; CN 1378593 A 20021106; EP 1212411 A2 20020612; JP 2003507063 A 20030225; KR 20020059370 A 20020712

DOCDB simple family (application)

**US 0022906 W 20000818**; AU 6792500 A 20000818; CA 2382483 A 20000818; CN 00814124 A 20000818; EP 00955779 A 20000818; JP 2001518853 A 20000818; KR 20027002204 A 20020220