

Title (en)
INSULIN-DEPENDENT YEAST OR FUNGI.

Title (de)
INSULIN-ABHÄNGIGE HEFEN ODER PILZE.

Title (fr)
CHAMPIGNON OU LEVURE DEPENDANT DE L'INSULINE.

Publication
EP 0666903 A4 19970604 (EN)

Application
EP 93923255 A 19931005

Priority
• US 9309504 W 19931005
• US 95629492 A 19921005

Abstract (en)
[origin: WO9407994A1] The present invention relates to newly created and isolated insulin-dependent mutant strains of yeast or fungi such as (*S. cerevisiae*). The mutants grow on complex media of defined and undefined compositions. Optimal growth, morphology and viability of certain isolates demonstrate varying dependence upon supraphysiological concentrations of insulin. Other isolates are relatively insensitive to the same concentrations of insulin and can be maintained in the presence of the hormone for extended periods of time without toxic effects. The invention also pertains to a method for detecting insulin secretagogues which employs the mutant yeast cells. Furthermore, the invention encompasses methods for the production of recombinant insulin employing the mutant yeasts as host cells.

IPC 1-7
C12N 1/14; **C12N 1/00**; **C12P 1/02**; **A61K 38/28**

IPC 8 full level
C07K 14/62 (2006.01); **C12N 15/81** (2006.01)

CPC (source: EP)
C07K 14/62 (2013.01); **C12N 1/185** (2021.05); **C12N 15/81** (2013.01); **C12R 2001/865** (2021.05)

Citation (search report)
• [X] M.A.MCKENZIE ET AL.: "Elements of an Insulin-like signal transduction pathway in *Saccharomyces cerevisiae*", MOLECULAR BIOLOGY OF THE CELL, vol. 3(Supplement), September 1992 (1992-09-01), pages 141a, XP002001679
• [X] BIOLOGICAL ABSTRACTS, vol. 85, no. 8, August 1988, Philadelphia, PA, US; abstract no. 83333, M.A. MCKENZIE ET AL.: "Effects of mammalian insulin on metabolism, growth, and morphology of a wall-less strain of *Neurospora crassa*" page 969; XP002001680
• [X] SHUSTER J R ET AL: "YEAST MUTANTS CONFERRING RESISTANCE TO TOXIC EFFECTS OF CLONED HUMAN INSULIN-LIKE GROWTH FACTOR I", GENE, vol. 83, no. 1, 15 November 1989 (1989-11-15), pages 47 - 55, XP000054543
• See references of WO 9407994A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9407994 A1 19940414; AU 5320994 A 19940426; CA 2146432 A1 19940414; EP 0666903 A1 19950816; EP 0666903 A4 19970604

DOCDB simple family (application)
US 9309504 W 19931005; AU 5320994 A 19931005; CA 2146432 A 19931005; EP 93923255 A 19931005