

Title (en)
IMPROVED IN VIVO PRODUCTION OF CEPHALOSPORINS

Title (de)
VERBESSERTE IN VIVO-PRODUKTION VON CEPHALOSPORINEN

Title (fr)
PRODUCTION IN VIVO AMELIOREE DE CEPHALOSPORINES

Publication
EP 1141372 A2 20011010 (EN)

Application
EP 99964657 A 19991221

Priority
• EP 99964657 A 19991221
• EP 9910292 W 19991221
• EP 98204469 A 19981222

Abstract (en)
[origin: WO0037671A2] The present invention discloses a process for the production of 7-ACA or a derivative thereof comprising the steps of fermenting a *P. chrysogenum* strain being transformed with an expression construct comprising a nucleotide sequence encoding expandase, hydroxylase and acetyltransferase activity in the presence of a suitable acyl side chain precursor, or a salt or ester thereof, such that an N-acylated 7-ACA compound is produced, N-deacylating the thus produced N-acylated 7-ACA compound and, optionally, acylating the free amino group and/or substituting the 3' acetate group with a side chain suitable to form a cephalosporin antibiotic, characterised in that the nucleotide sequence encoding the acetyltransferase is derived from *Acremonium chrysogenum* and starts at the second ATG of the open reading frame as present in said nucleotide sequence.
[origin: WO0037671A2] The present invention discloses a process for the production of 7-amino cephalosporanic acid (7-ACA) or a derivative thereof comprising the steps of fermenting a *P. chrysogenum* strain being transformed with an expression construct comprising a nucleotide sequence encoding expandase, hydroxylase and acetyltransferase activity in the presence of a suitable acyl side chain precursor, or a salt or ester thereof, such that an N-acylated 7-ACA compound is produced, N-deacylating the thus produced N-acylated 7-ACA compound and, optionally, acylating the free amino group and/or substituting the 3' acetate group with a side chain suitable to form a cephalosporin antibiotic, characterised in that the nucleotide sequence encoding the acetyltransferase is derived from *Acremonium chrysogenum* and starts at the second ATG of the open reading frame as present in said nucleotide sequence.

IPC 1-7
C12P 35/00

IPC 8 full level
C12P 35/06 (2006.01); **C12N 9/10** (2006.01); **C12P 35/00** (2006.01); **C12R 1/82** (2006.01)

CPC (source: EP KR)
C12N 9/1029 (2013.01 - EP); **C12P 35/00** (2013.01 - EP KR)

Citation (search report)
See references of WO 0037671A2

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 0037671 A2 20000629; **WO 0037671 A3 20000914**; AU 3042600 A 20000712; CN 1331751 A 20020116; EP 1141372 A2 20011010; HK 1041610 A1 20020712; JP 2002533092 A 20021008; KR 20010089672 A 20011008

DOCDB simple family (application)
EP 9910292 W 19991221; AU 3042600 A 19991221; CN 99814782 A 19991221; EP 99964657 A 19991221; HK 02103286 A 20020502; JP 2000589724 A 19991221; KR 20017007915 A 20010621