Title (en)
COLD-ACTIVE PROTEASE CP70

Title (de)
KÄLTEAKTIVE PROTEASE CP70

Title (fr)
PROTEASE CP70 ACTIVE A FROID

Publication
EP 0876500 A1 19981111 (EN)

Application
EP 97903957 A 19970124

Priority
- JP 1220796 A 19960126
- US 9701148 W 19970124

Abstract (en)
[origin: WO9727313A1] A psychrophilic protease is here disclosed which has the following physicochemical properties: (a) specific activity and substrate specificity: the protease acts on casein, gelatin, hemoglobin and albumin to specifically decompose them in the order of casein, gelatin, hemoglobin and albumin; (b) optimal pH: 8.0; (c) pH stability: the protease is stable at a pH in the range of 6.5 to 10.0 at 30 DEG C for 1 hour; (d) optimal temperature: about 40 DEG C; (e) temperature stability: at pH 7 for 1 hour, the protease is scarcely inactivated at a temperature up to 30 DEG C, but it is inactivated at 40 DEG C as much as about 40 % and completely inactivated at 50 DEG C in about 10 minutes; (f) enzyme activity: the protease has about 50 % or more of its maximum activity at 20 DEG C; (g) the active center of the enzyme is serine; and (h) the molecular weight of the protease is about 70 kDa as measured by SDS-PAGE.

IPC 1-7
C12P 21/04; C12N 9/52; A61K 38/00; A23J 1/00

IPC 8 full level
A23J 3/34 (2006.01); **C07K 14/195** (2006.01); **C07K 14/41** (2006.01); **C11D 3/386** (2006.01); **C12N 9/52** (2006.01); **C12P 21/04** (2006.01); C12R 1/20 (2006.01)

CPC (source: EP)
A23J 3/341 (2013.01); **C12N 9/52** (2013.01)

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

DOCDB simple family (publication)
WO 9727313 A1 19970731; AR 005541 A1 19990623; BR 9707203 A 19991228; CA 2243598 A1 19970731; CA 2243598 C 20021022; CN 1214084 A 19990414; EP 0876500 A1 19981111; EP 0876500 A4 20021127; JP H09201195 A 19970805

DOCDB simple family (application)
US 9701148 W 19970124; AR P970100288 A 19970124; BR 9707203 A 19970124; CA 2243598 A 19970124; CN 97193195 A 19970124; EP 97903957 A 19970124; JP 1220796 A 19960126