DATA SHEET

cellco
Biotecnologia ao seu alcance

Proteinase K - Solid

from Tritirachium album
Endopeptidase K

Cat. Nº.	Amount
☐ DPK-103S	100 mg
☐ DPK-103M	200 mg
☐ DPK-103L	500 mg

Unit Definition: One unit is the amount of enzyme which releases at 37 °C in 1 min as many folin-positive amino acids and peptides from haemoglobin as 1 µmol of tyrosine.

Shipping:
Shipped on blue ice

Storage Conditions:
Store at - 20 ºC)

Shelf life:
12 months

Molecular Weight:
28.9 kDa

CAS#:
39450-01-6

EC number:
254-457-8

Purity:
free of RNases, DNases and Exonucleases

Form:
white powder

Applications:
Digestion of proteins during DNA and RNA preparation.

Description:
Proteinase K is a serine protease that exhibits a very broad cleavage specificity. The protein with a molecular weight of 28.9 kDa cleaves peptide bonds adjacent to the carboxylic group of aliphatic and aromatic amino acids. Proteinse K is not inactivated by metal chelating reagents such as EDTA or detergents such as SDS and is active over a wide range of pH (4 - 12.5).

Proteinase K is a highly active and stable protease with low cutting specificity. The enzyme belongs to the group of subtilisine-related serine proteases and is strongly inhibited by PMSF. In presence of 0.5 - 1 % SDS Proteinase K inactivates DNases and RNases in eucaryotic and microbiological cell cultures. The use of Proteinase K during lysis of the cells allows the isolation of intact highly-molecular nucleic acids.

Activity:
Specific activity:
> 30 units/mg

Dnase activity:
not detectable

Rnase activity:
not detectable