DATA SHEET

Jena Bioscience

Proteinase K - Solution

from *Tritirachium album*

Endopeptidase K

Cat. No.	Amount
EN-178S	2 x 1 ml
EN-178L	10 x 1 ml

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.

For *in vitro* use only!

Shipping: shipped on blue ice

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

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: aqueous solution

Concentration: 20 mg/ml

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:
> 600 units/ml