Proteinase K

PRTK-L01-001

Description

Proteinase K is a serine protease that exhibits a very broad cleavage specificity. The Protein with a molecular weight 28.900 kD cleaves peptide bonds adjacent to the carboxylic group of aliphatic and aromatic amino acids. Proteinase K is not inactivated by chelating reagents such as EDTA or detergents such as SDS and is active over a wide range of pH (4-12.5). Working temperature range is 20–65°C with optimum activity at 50–56°C.

Features

Proteinase K isolated from *Tritirachium album* is used for protease digestion during DNA and RNA preparation. The enzyme is typically used at 50–200 µg/ml in nucleic acid preparations at pH 7.5–8.5 and 37–55°C. Incubation times vary from 30 minutes to 18 hours. Specific Activity of > 30 units/mg protein (hemoglobin, pH 7.5, 37°C).

Applications

- ✓ Isolation of genomic DNA from cultured cells and tissues
- ✓ Removal of DNases and RNases during DNA and/or RNA purification
- ✓ Determination of enzyme locations

Storage

4 °C or -20 °C for at least 24 months:

- ✓ 50 mM Tris-HCl (pH 8.0), 5 mM CaCl2 for storage at 2–8°C.
- ✓ 50 mM Tris-HCl (pH 8.0), 5 mM CaCl2, 50% glycerol (v/v) for storage at -20°C.

Product use limitation

This product is developed and sold exclusively for research purposes and use only. The product is not intended for diagnostics or drug development, nor is it suitable for administration to humans or animals.