

**Proteinase K**

(isolated from Tritirachium album)

**Application:**

- Digestion of proteins

**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).

**Activity:** > 30 units/mg protein (hemoglobin, pH 7.5, 37°C)

**Unit definition:**

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 hemoglobin as 1 µmol of tyrosine.

**Features:**

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.

**Usage:**

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.

**Quality:**

- purified by chromatography and lyophilised
- RNases: not detectable
- DNases: not detectable
- Exonucleases: not detectable

**Storage:**

4 °C or -20 °C for at least 24 months, shipment at ambient temperature

**Ordering information:**

Cat.-no	Description	Amount
405-002	Proteinase K	200 mg
405-010	Proteinase K	1000 mg

**Related products:**