

## Proteinase K

**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 (haemoglobin, 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 haemoglobin 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

**Storage Buffer (when supplied)**

50 mM Tris, pH 8, 3 mM CaCl<sub>2</sub>, glycerol 50%

**Ordering information:**

Cat.-no	Description	Amount
405-002	Proteinase K	200 mg
405-010	Proteinase K	1000 mg
405-004	Proteinase K (100 mg/ml)	5x1 ml
405-001	Proteinase K (20 mg/ml)	5x 1ml

## Proteinase K

GeneON .. a good decision ..

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E-Mail: <mailto:info@geneon.net> WEB: <http://www.tag-dna.com/> Version: 25.10.2009 AS

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**Cat: 405-001; 5 x 1 ml (20 mg/ml)**

(isolated from *Tritirachium album*)

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