Proteinase K

Description: Proteinase K is a non-specific serine protease with a very high specific activity. It has been used for isolation of mRNA, high molecular weight DNA and inactivation of other enzymatic activities. Proteinase K is active with or without the presence of SDS, EDTA and chaotropic salts.

Proteinase K is a broad-spectrum serine protease for general digestion of proteins in biological samples. The enzyme is free of RNase and DNase activities. The recommended working concentration for Proteinase K is 50 – 100 µg/mL in the majority of applications.

Availability: in both liquid (in 50 mM Tris-HCl pH 8.0, 1 mM $CaCl_2$, 50 % glycerol) and lyophilized powder form.

Content

Ref No.	405002	405010
Proteinase K	200 mg	1000 mg
Datasheet	1	1

Reaction buffer: 50 mM Tris-HCl pH 7.5, 1 mM $CaCl_2$.

Application: Proteinase K can be used for nucleic acid purification

Specific activity: > 30 units/mg

Unit definition: One unit is defined as the amount of enzyme that liberates Folin-positive amino acids and peptides, corresponding to 1 pmole tyrosine under assay conditions in 1 minute using haemoglobin as substrate (1).

Quality control:

- Digestion activity
- No detectable exo /endonuclease activity
- Absence of RNase contamination

Stability and storage: Proteinase K in lyophilized form is stable at RT for short periods of time (up to 4 days). For long term storage, we recommend -20 °C.