

## Proteinase K

For Research Use Only

YT9052	1ml (Conc.20mg/ml)
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### 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:** >30units/mg protein (hemoglobin, pH7.5, 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  $\mu$ mol 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.

### Storage:

Store at -20°C.