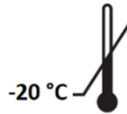


## Proteinase K

**REF** MO5421      Quantity: 1ml

 Wet Ice      Concentration: 20mg/ml

**RUO**



### Components

Contents	Amounts
Proteinase K	1ml

### Description

Proteinase K is a serine protease that is used to digest proteins and remove contamination from nucleic acid preparations. In molecular biology research, adding Proteinase K to nucleic acid preparations inactivates nucleases that could degrade DNA or RNA during isolation and purification applications.

### Applications

Genomic DNA, RNA Purification, Gene diagnostic kit, IHC, ISH and other possible application.

### Source

Tritirachium album Limber

### Inhibition and Inactivation

Inhibitors: Proteinase K is not inactivated by metal chelators, by thiol-reactive reagents or by specific trypsin and chymotrypsin inhibitors. Phenylmethylsulfonyl fluoride and Di-isopropyl phosphorofluoridate completely inhibit the enzyme.

### Activity

Liquid enzyme  $\geq 40$  U/mg

One unit is defined as the amount of enzyme that catalyzes the formation of 1u/mol of tyrosine per minute at pH 7.5 at 37°C.

Note: To ensure the proper enzyme activity prevent multiple freeze-thaw and use-up the enzyme by 6 months after opening the product.

## Quality Control Assay Data

### A. Endodeoxyribonuclease Assay

No conversion of covalently closed circular DNA to nicked DNA was detected after incubation of 40µg of Proteinase K with 1µg of pUC19 DNA for 4 hours at 37°C.






### B. Ribonuclease Assay

No detectable RNA degradation after incubation of 80ng of 2kb RNA transcript with 40µg of Proteinase K for 4 hours at 37°C.


### C. Labeled Oligonucleotide (LO) Assay



No degradation of single-stranded and double-stranded labeled oligonucleotide was observed after incubation with 40µg of Proteinase K for 4 hours at 37°C.

## Signs

Signs	Definitions
	Temperature range on product use
	For Research Use Only
	Name and address of the manufacturer of the product
	Product technical code
	Product shipping conditions



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