

Proteinase K

F MO5421

Quantity: 1ml



Wet Ice

Concentration: 20mg/ml





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

(2)

Liquid enzyme ≥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.



A. Endodeoxyribonuclease Assay

No conversion of covalently closed circular DNA to nicked DNA was detected after incubation of $40\mu g$ of Proteinase K with $1\mu g$ of pUC19 DNA for 4 hours at $37^{\circ}C$.

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
RUO	For Research Use Only
	Name and address of the manufacturer of the product
REF	Product technical code
	Product shipping conditions







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