Product Specifications

IBI SCIENTIFIC
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PROTEINASE K SOLUTION

20mg/ml (Recombinant Protein)

Product Number	*Size*
IB05406	**5ml**

PHYSICAL SPECIFICATIONS

Molecular Weight	28.9kDa
Enzyme Activity (U/mg)	> 30U/mg
DNase assay	None Detected
RNase assay	None Detected

STORAGE

Store at -20°C for up to 24 months.
Store at +4°C for up to 18 months.
Store at room temperature for up to 12 months.

It is recommended to make aliquots for multiple uses.
Avoid repeated freeze/thaw cycles.

ITEM DESCRIPTION

IBI Recombinant Proteinase K solution contains Recombinant Proteinase K powder originally isolated from the mold Tritirachium album, that is a serine protease with broad substrate specificity and relatively high proteolytic activity. It preferentially cleaves ester and peptide bonds adjacent to the C-termini of hydrophobic, aliphatic, or aromatic amino acids. IBI recombinant proteinase K is highly pure, determined by SDS-PAGE to be 95%. High purity, sterility, no bio-burden, and no presence of DNase, RNase, DNA and RNA contaminants. By using absorbance A275 as the vertical axis and different concentrations of a tyrosine as the horizontal axis the enzymatic activity was calculated to >30U/mg.

IBI Recombinant Proteinase K is expressed in pichia pastoris, purified & lyophilized.

CAS NO.

CAS# n/a

RECOMMENDED USE

IBI Recombinant Proteinase K Solution promotes cell lysis by activating a bacterial autolytic factor which is ideal for isolating DNA and RNA from tissues or cell lines. The solution is also effective on native proteins and can therefore be used to rapidly inactivate endogenous nucleases; such as, RNases and DNases during nucleic acid isolation. The enzyme is tested for the absence of RNases and DNases and is virtually free of DNA. It is eespecially suitable for isolating PCR and RT-PCR templates.

Makeup:
50mM Tris, 3mM $CaCl_2$, 50% Glycerol, Adjust pH to 8.0 with either HCl or NaOH.

- Dissolve solids in 50% volume of Certified Nuclease Free Water (IB42100).
- QS to 95% with glycerol. pH to 8.0 using HCL or NaOH.
- QS to 100% volume with glycerol.
- Recheck pH using a different meter.
- Mix well using a sterile stir bar and filter through a 0.2 micron sterile filter.
- Store buffer at 4°C and let chill before preparing Pro-K solution.
- Using cold buffer, remove Proteinase K from freezer and dilute powder to 10mg/mL with buffer. Mix well using a stir bar. Filter solution through a 1.2 micron PES membrane syringe or disc filter and aseptically fill into final container. Aliquot and store at -20°C.
- Use containers and materials that have low protein binding characteristics.

WARNING

Classification: No known hazards

FOR RESEARCH AND DEVELOPMENT PURPOSES ONLY

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