

Product Specifications



SCIENTIFIC

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PROTEINASE K (Recombinant Protein)

Product Number

IB05400 _____ 100mg
IB05402 _____ 200mg

Size

PHYSICAL SPECIFICATIONS

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

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.

RECOMMENDED USE

IBI Recombinant Proteinase K powder originally isolated from the mold *Tritirachium album*, 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

PUT IN SOLUTION

50mM Tris, 3mM CaCl₂, 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.

Note: If you are able to use this product entirely in 15 days or less, IBI Recombinant Pro-K powder can be placed directly into Pure water and 50% glycerin at required concentration.

WARNING

Classification: Skin Corrosion/Irritation - 2
Serious Eye Damage/Eye Irritation - 2
Respiratory Sensitization - 1

Hazard Statements: H315-Causes skin irritation • H319-Causes serious eye irritation • H334-May cause allergy or asthma symptoms or breathing difficulties, if inhaled.

Precautionary Statements: P261-Avoid breathing dust/fume/gas/mist/vapors/spray • P264-Wash face, hands, and any exposed skin thoroughly after handling • P280-Wear protective gloves/protective clothing/eye protection/face protection • P285-In case of inadequate ventilation wear respiratory protection • P302+P352-IF ON SKIN: Wash with plenty of soap and water • P304+P341-IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing • P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing • P321-Specific treatment (see supplemental first aid instructions on this label) • P332+P313-If skin irritation occurs: Get medical advice/attention • P337+P313-If eye irritation occurs: Get medical advice/attention • P342+P311-If experiencing respiratory symptoms: Call POISON CENTER or doctor/physician.



DANGER!

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Building Quality Scientific.