Data Sheet (Cat.No.TRP-00625)

TargetMol

Proteinase K (NGS grade)

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Proteinase K (Protease K) (NGS grade) (EC 3.4.21.64) is a serine protease known for its high enzyme activity and broad substrate specificity. It preferentially cleaves ester and peptide bonds adjacent to hydrophobic, sulfur-containing, and aromatic amino acids at the C-terminal. It is commonly used in protein degradation to produce short peptides. This product is NGS grade, free of Nickase.
Targets(IC50)	Serine Protease
In vitro	Product Information: This compound can be utilized for various applications including 1. Gene diagnosis kits; 2. RNA and DNA extraction kits; 3. Extraction of non-protein components from tissues and degradation of protein impurities, such as in the preparation of DNA vaccines and heparin; 4. Preparation of chromosomal DNA for pulse-field gel electrophoresis; 5. Protein blotting; 6. Enzyme-based glycated albumin reagent development and mass production for in vitro diagnostics. Molecular Weight: 29 kDa (SDS-PAGE) Isoelectric Point: 7.81 Optimal pH: 7.0-12.0 Optimal Temperature: 65°C pH Stability: pH 4.5-12.5 (25°C, 16 h) Thermal Stability: Stable below 50°C (pH 8.0, 30 min) Storage Stability: Over 90% activity for one year at 25°C Activators: SDS, Urea Inhibitors: Diisopropylfluorophosphate (DFP), PMSF Instructions for Use: Soluble at 1 mg/mL in water, or follow reference literature for specific experiments.