

Proteinase K

CAT# **AP1810**
Storage: **Store at -20°C.**
Activity: >40 units/mg

Preparation Instructions

Preparation Instructions This product is soluble in water (1 mg/ml), yielding a clear colorless solution.
Recommended Concentration: Stock Conc.: 10-20mg /mL Working Conc.: 10-100 ug/mL

Applications

1. Mitochondria Isolation
2. Protein digestion for nucleic acid purification Proteinase K is frequently used in molecular biology applications to digest unwanted proteins, such as nucleases from DNA or RNA preparations from microorganisms, cultured cells, and plants. The enzyme is typically used at 10-100 µg/ml in nucleic acid preparations at pH 7.5-8.0 and 37 °C. Incubation times vary from 30 minutes to 18 hours. Proteinase K is usually denatured by subsequent phenol extractions, although it can auto digest during long incubations.
3. Proteinase K has been used to remove endotoxins bound to cationic proteins such as lysozyme and ribonuclease A.
4. Determination of enzyme localization on membranes.
5. Treatment of paraffin embedded tissue sections to expose antigen binding sites for antibody labeling.
6. Remove nucleases for in situ hybridization.
7. Research on prions in Transmissible Spongiform Encephalopathies (TSE) and proposed diagnostic tests utilize Proteinase K digestion of proteins from brain tissue samples.
8. Protease footprinting by Proteinase K digestion can reveal protein-protein surface interactions.