

Lyophilized Proteinase K Protocol



For research use only

Catalogue Number

PK000011 (11 mg), PK000065 (65 mg), PK000100 (100 mg)

Introduction

Proteinase K is a non-specific serine protease which remains active in detergents and reagents over a broad pH range (4.0-12.5, optimum pH8.0) and is also stable over the temperature range of 25°C to 65°C during use. Proteinase K is useful for protein digestion and contamination removal during nucleic acid purification to prepare RNA and high molecular weight DNA for subsequent reactions. Maintaining consistent storage conditions is essential as temperature fluctuations can affect product stability.

Specifications

- Active in detergents and reagents
- Broad pH range (4.0-12.5, optimum pH8.0)
- Active temperature range of 25°C to 65°C during use
- Lyophilized Proteinase K should be stored at -20°C for extended periods
Proteinase K solutions are stable for 6 months at 2-8°C
- Shipped at room temperature
- Effective protein digestion and contamination removal

Preparation

1. Carefully open the Proteinase K vial.
2. Add sterilized ddH₂O as indicated on the vial label.
3. Gently mix to dissolve the Proteinase K powder.
4. Store the Proteinase K solution at 2-8°C.

Animal tissue digestion

1. Transfer up to 25 mg of animal tissue to a 1.5 ml microcentrifuge tube.
2. Add 200 µl of lysis buffer (e.g. 30 mM Tris-Cl, 10 mM EDTA, 1% SDS) to the sample.
3. Add 20 µl of Proteinase K solution (10 mg/ml) to the sample then mix by vortex.
4. Incubate the sample at 60°C for 2-3 hours or until the sample lysate becomes clear.