Creative Enzymes®

Proteinase K

Cat. No. NATZ-112

Lot. No. (See product label)

Introduction

Description	Proteinase K is a serine protease, sourced from Parengyodontium album (formerly known as Tritirachium album). It exhibits robust activity across a broad range of conditions, including high temperatures and environments containing Sodium Dodecyl Sulfate (SDS). As a versatile endopeptidase with exceptional specific activity, Proteinase K efficiently degrades proteins, including DNases and RNases, during nucleic acid extraction processes. This ensures the integrity of isolated DNA or RNA remains intact. Produced through expression in Pichia pastoris, Proteinase K is rigorously purified to eliminate any traces of exonucleases, endonucleases, and ribonucleases, making it highly suitable for sensitive molecular biology applications.

Product Information

Source	Parengyodontium album
Form	Powder or Solution
Activity	≥30 U/mg lyophilizate ≥40 U/mg protein ≥800 U/mL liquid
Unit Definition	One unit of Proteinase K hydrolyzes urea-denatured hemoglobin producing the color equivalent of 1 µmol tyrosine per 1 minute at 37°C and pH 7.5 (Folin & Ciocalteu's method), 1 U = 1 mAnsonU.

Storage and Shipping Information

Storage	–20°C