Creative Enzymes®

Native Tritirachium album limber Proteinase K

Cat. No. NATE-0637

Lot. No. (See product label)

Introduction

Description Proteinase K (PROK) is a serine protease with broad specificity towards aliphatic, aromatic and other hydrophobic amino acids. PROK has a molecular weight of 27,000 daltons and is Ca2+ dependent. It is not inactivated by metal ion chelating agents such as EDTA, sulfhydryl reagents, PCMB, TLCK, or TPCK. It also retains activity in 0.5% SDS. It can be inhibited by PMSF or DFP.

Applications Useful for the proteolytic inactivation of nucleases during the isolation of DNA and RNA. Removes endotoxins that bind to cationic proteins such as lysozyme and ribonuclease A. Reported useful for the isolation of hepatic, yeast, and mung bean mit ochondria Determination of enzyme l ocalization on membranes Treatment of paraffin embedded tissue sections to expose antigen binding sites for antibody labeling. Digestion of proteins from brain tissue samples for prions in Transmissible Spongiform Encephalopathies (TSE) research.

Synonyms Proteinase K; EC 3.4.21.64; Tritirachium alkaline proteinase; Tritirachium album serine proteinase; Tritirachium album proteinase K; endopeptidase K; 39450-01-6; protease K

Product Information

Source Tritirachium album limber

Form Type I, powder; Type II, Liquid in 20mg/ml in 10mM Tris-HCl, 1mM calcium acetate, pH 7.5 containing 50% glycerol.

EC Number EC 3.4.21.64

CAS No. 39450-01-6

Molecular Weight 27 kDa

Purity Purified to remove DNase and RNase.

Activity Type I, > 20 units per mg dry weight; Type II, > 400 u/ml

Unit Definition One Unit releases one micromole of Folin positive amino acids, measured as tyrosine, at 37°C, pH 7.5, using urea denatured hemoglobin as the substrate.

Storage and Shipping Information

Storage Powder: 2-8°C; Liquid: −20°C