

## 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 Ca<sup>2+</sup> 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 mitochondria. Determination of enzyme localization 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