

## **Product Datasheet**

Proteinase K (Tritirachium album limber) (orb420129)



## www.biorbyt.com

**Description**nts. Proteinase K (Tritirachium album

Conjugation Unconjugated

Preservatives None

Form/Appearance Lyophilized

**Storage** Store vial at 2-8°C prior to restoration.

Solutions in 50mM Tris-HCl, pH 8.0, 1mM CaCl2 stored at 2-8°C are stable

for months.

**Note** For research use only

**Application notes** Proteinase K is specifically formulated

for molecular cloning, nucleic acid research and protein/peptide structural analysis. One unit liberates one µmole of Folin positive amino acids, measured as tyrosine, at 37° C at pH 7.5 using urea denatured hemoglobin as the substrate. Recommended working concentration 0.05-0.1mg/mL.

**Purity** A lyophilized powder.

Chromatographically purified to remove DNase and RNase activity. Stable over a wide pH range: 4.0-12.5, optimal pH 7.5-8.0, using denatured hemoglobin as substrate. Although calcium ions do not affect the enzyme activity, they do protect Proteinase K against autolysis and increase thermal stability when present at a concentration of 1-5µmoles. It retains its activity in the presence of SDS or urea (0.5-1% SDS and 1-4M urea). Raising the

temperature of the reaction from 37°C to 50-60°C can increase the activity several fold. Proteinase K is inactivated by diisopropyl fluorophosphate or phenyl methane sulphonyl fluoride. Chelating agents such as citrate and EDTA have no effect on the enzyme activity. Proteinase K can also be inactivated by heating above 65°C for 15-20 min or by extraction with

phenyl/chloroform.

Hazard Information

Non-Toxic