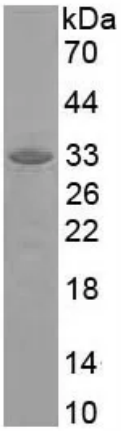
Active Proteinase K (PROK)

Catalog#:PPV13014

概述（Summary）

别称（Alternative Names）	Endopeptidase K; Tritirachium alkaline proteinase; Protease K; Tritirachium alkaline proteinase; Tritirachium album serine proteinase
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala16-Ala384】
Accession #	P06873
表达宿主（Host）	Yeast
种属（Species）	Pan-species (General)
预测分子量（Predicted MW）	40.6 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Hydrolyzes keratin at aromatic and hydrophobic residues.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

Calculation

$$\text{PROK activity（U/mg）} = \frac{N \times 0.8}{5 \times 0.2d}$$

N= released L- tyrosine μg/ml
0.8= Total volume (in milliliters) of stopped reaction
5= Time of assay (inminutes)
0.2= Volume of enzyme (in milliliter) of enzyme used
d= Original enzyme concentration (mg/ml)
The specific activity of recombinant Proteinase K is 40000U/mg

Proteinase K is a typical member of the subtilisin family of proteinases .It exhibits broad substrate specificity and degrades many proteins in the native state, even in the presence of detergents.The predominant site of cleavage is the peptide bond adjacent to the carboxyl group of aliphatic and aromatic amino acids with blocked alpha amino groups. Thus,the activity of recombinant Proteinase K measued by hydrolyzing casein.The reaction was performed in adding 200μl recombinant Proteinase K(dilued by 0.01mol/L Tris-HCL,pH 8.0) to 200μl 10g/L casein ,rapidly mixing,incubated for 5min at 55 ℃,stop the reaction with 400μl 0.4mol/L TCA.Clarify by filtration through a 0.45 m filter or by centrifugation. Read the supernatant an 275nm. The blank use 200μl 0.01mol/L Tris-HCL,pH 8.0 replace the Proteinase K. One unit is described as that amount of enzyme that liberates 1 μg of L- tyrosine within one minute at 55°C using casein as a substrate.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.