

## PRODUCT INFORMATION

**Proteinase K Powder**

v. 230101

<b>Catalog number</b>	C15002-20MG / C15002-1G
<b>Package</b>	20 mg/BTL / 1 g/BTL
<b>Background</b>	Proteinase K (E.C.3.4.21.64) is an extracellular serine endoproteinase produced by <i>Tritirachium album</i> Limber. Proteinase K is active in a wide range of temperatures and buffers with optimal activity between 20 and 60°C and a pH between 7.5 and 12.0. Activity is stimulated when up to 2% SDS or up to 4 M urea are included in the reaction. Calcium is important for thermostability of Proteinase K but it is not required for catalysis, therefore Proteinase K is also active in buffers containing chelating agents such as EDTA.
<b>Description</b>	No DNase contamination detected by digestion of $\lambda$ DNA at 37°C for 6 hours. No RNases contamination detected by digestion of $\lambda$ DNA at 25°C for 16 hours. Host genomic DNA/RNA is no residual detected by PCR.
<b>Species</b>	<i>Tritirachium album</i>
<b>Tags</b>	Tag Free
<b>Source</b>	<i>Pichia pastoris</i>
<b>Endotoxin</b>	Please contact us for more information.
<b>Activity</b>	Measured by its digestion activity. The activity is >30U/mg. One unit will digest Casein at 37°C (pH 7.5) per minute to produce equal absorbance as 1.0 $\mu$ mol of L-tyrosine.
<b>Purification</b>	> 95% by SDS-PAGE.
<b>Formulation</b>	Lyophilized powder is recommended to dissolve in 20mM Tris-HCl, 30mM NaCl, 50% Glycerol, 5mM CaCl <sub>2</sub> , pH 7.2-7.4.
<b>Storage</b>	Store the lyophilized protein at 2-8°C for up to 18 months and $\leq$ -20°C for 3 year. Avoid repeated freeze/thaw cycles.

*For Research Use Only.*