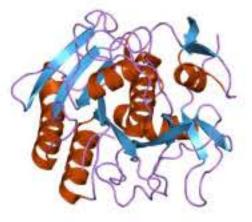
# Recombinant Proteinase K

## Cat No. NATE-1240

Creative Enzymes provides molecular biology grade lyophilized powder of Recombinant Proteinase K with various package sizes.



**Proteinase K** is a broad-spectrum serine protease originally isolated from fungus *Engyodontium album* (*Tritirachium album*). The enzyme was named "proteinase K" for its ability to digest keratin. Structural and molecular biology studies suggest that the enzyme belongs to the subtilisin family characterized with a catalytic triad (Asp<sup>39</sup>-His<sup>69</sup>-Ser<sup>224</sup>) in the active site. Proteinase K has no pronounced cleavage specificity and the preferential cleavage site is the peptide bond adjacent to hydrophobic amino acids.

Creative Enzymes®

#### **Product Information**

Product Name	Proteinase K from Tritirachium album Limber, recombinant
Cat No.	NATE-1240
Source	From yeast cells with cloned gene encoding genetically engineered <i>Engyodontium album (Tritirachium album</i> ) endolytic protease
Physical Appearance	Lyophilized powder
Temperature Profile	Maximum activity at 70°C, recommended at 37-70 °C.
pH Range	4.5-12.0 (optimum pH range 7.5-11.5)
Purity	≥95% (Native-PAGE)
Specific Activity	≥34 U/mg protein
Unit Definition	One unit is defined as the enzyme activity that produces 1 $\mu$ mol of tyrosine per minute from casein at 37°C, pH 7.5.
DNA & RNA Contamination Assay	None detected
DNase Contamination Assay	None detected
RNase Contamination Assay	None detected
Caution	The molecular biology grade lyophilized powder is not sterile.

#### Advantages of Our Recombinant Proteinase K

- Our recombinant proteinase K is a mutant of the native proteinase that obtained improved specific activity, higher efficiency and a wider range of pH and temperature while retaining optimal activity.
- The board temperature profile of our recombinant proteinase K helps with protein unfolding, easing proteolysis by proteinase K.
- Proprietary processes result in DNA-free proteinase K, well-suited in isolating DNA and RNA templates.
- Lot-to-lot consistency, superior purity and cost-efficiency in larger scales upon bulk request.

If you are interested in our recombinant proteinase K product, please feel free to **contact us.** We look forward to cooperating with you in the near future.

### **Contact Information**



1-631-562-8517 1-516-512-3133



1-021-202-0211	1-210-215-21
info@creative-enzymes.com	

