

BioChain's Proteinase K

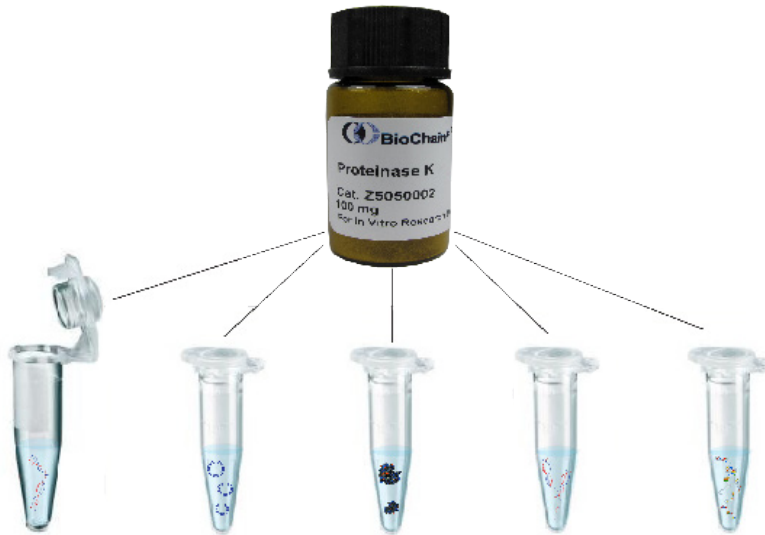
Effective and economical for isolation and purification

High Activity Protease for High Performance

Proteinase K is a broad non-specific serine protease that exhibits cleavage over a wide pH range (7-12). Its endonuclease activity is used for isolating mRNA, genomic DNA, and for digesting unwanted proteins during DNA and RNA preparations. Proteinase K has also been used on glycoprotein modification and on protein structure studies. BioChain offers proteinase K with consistently high activity and purity.

Applications:

Proteinase K can be used for:



- Isolation of native DNA and RNA from tissues and cells
- Isolation of plasmid DNA
- Inactivation of enzymes including endogenous RNases and DNases
- Suitable for isolation of nucleic acid for PCR
- Purification of PCR products to improve cloning efficiency

Key Features

- >99% of protein purity
- High Activity
- Active over a wide range of conditions: pH 7-12, ideal for diverse applications
- Consistent: Stringent activity assays to ensure quality
- Contamination-Free: Tested for absence of DNase and RNase activity
- Value Priced

Comparison of Protein K in Whole Blood DNA Extraction

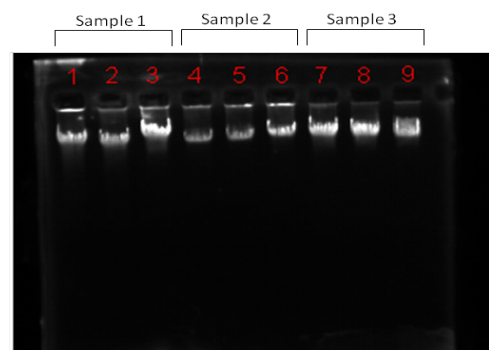


Figure 1. DNA Extracted from three whole blood samples using BioChain's and supplier R's proteinase K. Proteinase K activities were evaluated at two incubation temperatures. Lanes 1, 4, and 7: 65°C for 10 min (supplier R) Lanes 2, 5, and 8: 65°C for 10 min (BioChain) Lanes 3, 6, and 9: 55°C for 60 min (BioChain)

High Quality DNA for Sensitive Assay

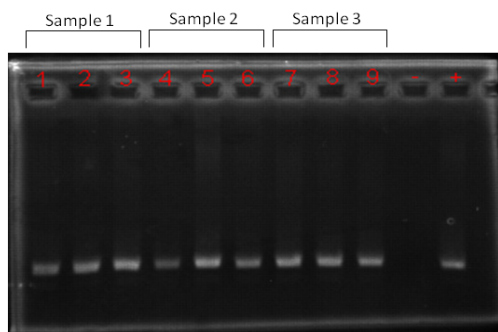


Figure 2. PCR analysis of isolated DNA from figure 1
 Lanes 1, 4, and 7: 65°C for 10 min (supplier R)
 Lanes 2, 5, and 8: 65°C for 10 min (BioChain)
 Lanes 3, 6, and 9: 55°C for 60 min (BioChain)
 -, negative control; +, positive control

Functional Assay Demonstrating BSA Digestion by Proteinase K

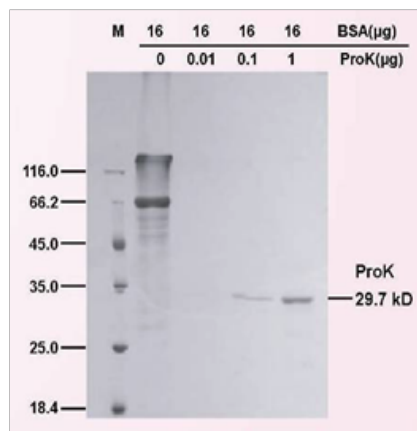


Figure 3. BSA was incubated with increasing concentration of proteinase K to demonstrate its activity. As seen in the native gel, even the smallest tested amount of BioChain’s proteinase K (0.01 µg) was able to fully digest BSA.

Catalog No.	Product	Unit
Z5050002	Proteinase K	100 mg

Related Popular Enzymes and Products

Z5040002	M-MLV Reverse Transcriptase	16,000 units
Z5040002-100	M-MLV Reverse Transcriptase	100,000 units
Z5050001	Ribonuclease A	100 mg
L4121050	Ultrascrip MMLV Reverse Transcriptase	50,000 units
L4121100	UltraScript MMLV Reverse Transcriptase	100,000 units
Z5040001	Placenta Ribonuclease Inhibitor	5,000 units
L1011100	RNAmate (RNA Purification)	100 ml
K5017100	Blood and Serum DNA Isolation Kit	1 kit
K50160055	Genomic DNA Extraction Kit	1 kit
K1341050	Broad Range Total RNA Isolation Kit	1 kit
K2014005	Total RNA Extraction Kit	1 kit
K1012050	Whole Blood RNA Extraction Kit	1 kit

Please inquire about our other kits and applications.