

FabAct™ Proteinase K

**Introducing BioVision's
New FabAct™ Proteinase K!**

- Enhanced Enzyme Activity
- Enhanced Enzyme Purity
- RNase/DNase Free
- Cost Effective
- Stable and Active Over a Wide pH Range
- Active with SDS, Urea and EDTA



BioVision proudly announces the launch of the Molecular Biology Grade, Fabulously Active (FabAct™) Proteinase K (recombinant), which is the most powerful proteinase among all proteinases characterized so far. FabAct™ Proteinase K is a highly pure, highly reactive serine protease that displays the ability to digest native proteins, thereby inactivating enzymes such as DNase and RNase without recourse to a denaturation process. It cleaves at the peptide bond adjacent to the carboxylic acid group of aliphatic, aromatic or hydrophobic amino acids. FabAct™ Proteinase K has a higher specific activity and is more stable at room temperature as compared to native Proteinase K. It is also stable and active over a wide pH range of 4-12. It can be used on any situation to digest native and denatured proteins. FabAct™ Proteinase K is also active with SDS, urea and EDTA and the most active temperature is 65°C.

Applications:

- Removal of DNases and RNases when isolating DNA and RNA from tissues or cell lines for amplification reactions
- Isolation of mRNA or genomic DNA from different tissues including mouse tail or from cultured cells
- For modifying glycoprotein for structural studies
- To treat tissue sections for in situ hybridization
- Improving cloning efficiency of PCR products
- For isolating bio-product to remove protein contaminants in industries such as leather, food, medicine intermediates, etc

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BioVision
BioVision Incorporated



**Proteinase K activity comparison using Protease Activity Assay Kit (K781-100)
at 37°C pH 8 in a white plate**

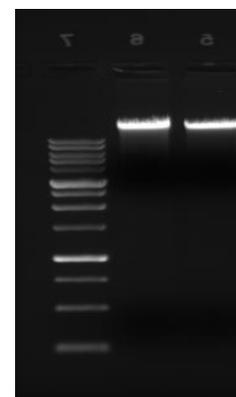
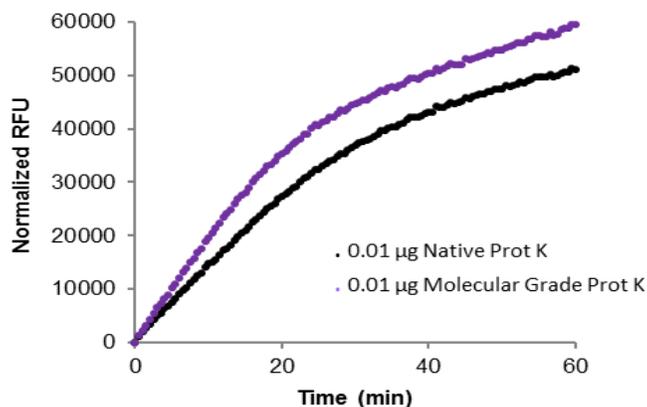


Figure 1: Calculated Activity at 37°C, pH 8.0: Native Prot K: 802 nmol/min/mg (802 U/mg) or 16 kU/mL for 20 mg/mL solution; Molecular Grade Prot K: 1072 nmol/min/mg (1.07 kU/mg) or 21 kU/mL for 20 mg/mL solution. *One unit is defined as the amount of protease that cleaves the FITC-labeled casein substrate to yield an amount of fluorescence equivalent to 1.0 nmol of unquenched FITC per minute at 37°C, pH 8.0. **Figure 2: 1% Agarose-TBE gel lane description:** Lane 1: 1 kb DNA Ladder; Lane 2: Whole Blood DNA isolated using Molecular Grade Pro K (total DNA yield from 500 µL blood sample = 3.6 µg; $A_{260/280}=1.90$); Lane 3: Whole Blood DNA isolated using (Native Prot K) (total DNA yield from 500 µL blood sample = 2.9 µg; $A_{260/280}=1.89$).

Product Name	Cat. No.	Size
FabAct™ Proteinase K (recombinant), Molecular Grade (Solid)	9212	100 mg, 500 mg, 1 g, 10 g
FabAct™ Proteinase K (recombinant), Molecular Grade (Liquid), 20mg/mL	9213	5 ml, 25 ml

Please visit www.biovision.com for a comprehensive overview on our products!!