

# Proteinase K Quick Facts

## General Info

Other Names	protease K, endopeptidase K, ProK
Protease Type	Serine protease of the subtilisin family
Molecular Weight	28.5 kDa
Activity	30 units/mg, 600 A U/ml in 20 mg/ml solution

## Usage Info

Storage	-20 °C up to 1 year
Gram-Solution Conversion	(20 mg/ml sln) 1 gram produces 50 ml
Common Applications	DNA & RNA isolation, genomic DNA isolation, protein digestion
Solubility	Dissolves in water, tris & PBS

## Activation & Optimization

Optimal Temperature	50 - 65 °C (active between 25 - 65 °C)
Optimal pH	7.5-12
Activators of Proteinase K	Ca <sup>2+</sup> , SDS, Urea

## Inactivation

Inactivation Temperature	95 °C for 10 minutes
Proteinase K Inhibitors	AEBSF (Pefabloc <sup>®</sup> ), PMSF, DIFP