Date 2006.10 Version 6_02

R.T.U.[™] Proteinase K Solution

Certificate of Analysis

Cat No. :

BL003-1 (1 x 1.25 ml) BL003-2 (4 x 1.25 ml)

Unit:

The amount of enzyme that liberates folin positive amino acids and peptides equivalent to 1u mole tyrosine at pH 7.5 at 37°C 10min, Using hemoglobin as a substrate.

Activity >30u/mg

Quality Assay:

DNase activity (not detected) RNase activity (not detected)

Molecular weight: 18.5 kD Daltons

Concentration: 20 mg/ml (50% glycerol)

Storage: Store at -20 °C (Do not store in a frost-free freezer)

Stability: < 1 year

Reference:

Ebeling,W. et al.(1974)Eur.J.Biochem.47,91-97. HansenJN(1974)Preparative Biochemistry. Brdicka,D.,and Krebs, W.(1972) BBA 297,212 ML.Anson,(1932)J.Gen.Physiol,16,59.

This enzyme was named Proteinase K with respect its keratin hydrolyzing activity. Proteinase K is a serine endopeptidase isolated from Tritirachium album. Proteinase K is used to degrade the enzyme such as microbial or mammalian DNase and RNase suitable from microbial or mammalian cells during cell digests. It is not only activated by $0.5^{-1}\%$ SDS or urea in pH range of $4.3^{-12.0}$ but also can be stability with Ca⁺⁺.

Working concentrations of the Proteinase K range from 100-200 ug/ml, incubate at 55°C, 30-60 minutes. The exact time of incubation and Proteinase K concentration depends on the amount of protein in the samples. To terminate the reaction, add PNSF, DFP, 2mM EDTA, TCA or heat treatment (15~30 min at 65°C) to inactivate Proteinase K.

Technical tips :

1. For particular nuclease rich samples, more Proteinase K should be added.

For Research Using Only. Please do not hesitate to contact us if you have any questions.

Manufactured for and distributed by Protech Technology Enterprise Co.,Ltd TEL:+886-2-2655-7677 / FAX:+886-2-2655-7601 / Toll Free:0800-231-530 E-MAIL: service@bio-protech.com.tw ; tech@bio-protech.com.tw WEB: http://www.bio-protech.com.tw