



Genaxxon BioScience Proteinase K

from *Tritirachium album*

fon:
+49 (0)7357 - 91 63 77
fax:
+49 (0)7357 - 91 63 78
eMail:
info@genaxxon.com
internet:
www.genaxxon.com

Product	Cat#	Package size
Proteinase K (from <i>Tritirachium album</i>)	M3036.0100	100 mg
Proteinase K (from <i>Tritirachium album</i>)	M3036.0200	200 mg
Proteinase K (from <i>Tritirachium album</i>)	M3036.0500	500 mg
Proteinase K solution (20U/mg)	M3037.0001	1 ml
Proteinase K solution (20U/mg)	M3037.0005	5 x 1 ml

Description: Proteinase K is a non-specific serine protease having a very high specific activity. It has been used for isolation of mRNA, high molecular weight DNA and to inactivate other enzymatic activities. Proteinase K is active with or without the presence of SDS and EDTA.

Source: *Tritirachium album*.

Specific activity: > 30 units/mg

Form: Lyophilised powder

Unit definition: One unit is defined as the amount of enzyme that liberates Folin-positive amino acids and peptides, corresponding to 1 pmole tyrosine under assay conditions in 1 minute using haemoglobin as substrate (1).

Stability and storage: Proteinase K in its lyophilised form is stable at RT for short periods of time (up to 4 days). For long term storage, we recommend -20°C.

QUALITY CONTROL

16-hour incubation: a 50 µl reaction solution containing 1 µg of lambda-DNA and 1.8 units enzyme incubated for 16 hours at 37°C resulted in the same DNA band pattern after gel electrophoresis as compared to the pattern produced without enzyme.

Exonuclease activity: Incubation of 6 units of the enzyme for 4 hours at 37°C in 50 µl assay buffer with 1 g sonicated 3H DNA (3 x 10⁵ cpm/µg) released less than 0.2% of radioactivity.

Endonuclease activity: Incubation of 1.8 units of enzyme with 1 µg PhiX174 RFI DNA in 50 µl assay buffer for 4 hours at 37°C gave less than 1.5% conversion of RFI.

RNAse contamination: Incubation of 6 units of enzyme with 1 µg MS2 RNA in 50 µl assay buffer for 4 hours at 37°C resulted in the same RNA band pattern after gel electrophoresis as compared to the pattern produced without the enzyme.

(1) Anson M.M (1939) J. Gen. Physiol., 22, 79.