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# ProductInformation

**PROTEASE from *Streptomyces griseus***

Product no. **P 6911**

Lot No. 065K098415

Store below 0 °C

## PRODUCT SUMMARY

**Activity and unit definition**
Protease was incubated for 10 minutes at pH 7.5 at 37 °C in a 6 ml reaction volume containing 0.54% casein and 0.041 M potassium phosphate buffer. The reaction is stopped by the addition of 5.0 ml 0.11 M trichloroacetic acid. Liberated tyrosine equivalents were determined using Folin-Ciocalteau reagent.

Activity: 4.0 units/mg solid

Unit definition: One unit will hydrolyze casein to produce color equivalent to 1.0 micromole (181 µg) of tyrosine per minute at pH 7.5 at 37 °C.

**Endonuclease-exonuclease**
One µg of λ Hind III fragments was incubated for 4 hours at 37 °C with protease at a final concentration of 500 µg/ml in a 50 µl reaction mixture containing 30 mM Tris-HCl, pH 7.8, 50 mM NaCl, 10 mM $MgCl_2$, 0.2% sodium dodecyl sulfate and 10 mM EDTA. No degradation of the DNA fragments was detected by agarose gel electrophoresis. Detection limit: Degradation of 10% of the DNA substrate is detectable.

**Endonuclease(Nickase)**
One µg of pBR322 DNA was incubated with protease at a final concentration of 500 µg/ml in a 50 µl reaction mixture containing 30 mM Tris-HCl, pH 7.8, 50 mM NaCl, 10 mM $MgCl_2$, 0.2% sodium dodecyl sulfate and 10 mM EDTA for 4 hours at 37 °C. No conversion of the covalently closed circular DNA to the nicked or linear form was observed by agarose gel electrophoresis. Detection limit: Conversion of 1% of the DNA substrate is detectable.

**RNase**
Two µg of transfer RNA were incubated with protease at a final concentration of 500 µg/ml in a 50 µl reaction mixture containing 30 mM Tris-HCl, pH 7.8, 50 mM NaCl, 10 mM $MgCl_2$, 0.2% sodium dodecyl sulfate and 10 mM EDTA for 4 hours at 37 °C. No degradation of the tRNA was detected by polyacrylamide gel electrophoresis. Detection limit: Degradation of 10% of the tRNA substrate is detectable.

**Reference:**
1. Maniatis, T., et al., Molecular Cloning, A Laboratory Manual, Cold Spring Harbor Laboratory (1982).

8/05