

Proteinase K
Supplement for Venor®GeM Sample Preparation Kit

Description

Proteinase K is a proteolytic enzyme. The enzyme uses Ca²⁺ ions for structural stability. Due to the high total activity of the enzyme, lysis can be carried out in the presence of EDTA. Proteinase K is therefore particularly useful for the extraction of nucleic acids from various biological samples.

The Venor®GeM Sample Preparation Kit is designed for highly efficient extraction of mycoplasma DNA from standard samples, like cell culture supernatants containing up to 10⁶ cells. However, other samples matrices like cell pellets, serum, or fermentation products may contain proteins at a concentration higher than 10 mg/ml. These samples may require an additional treatment with Proteinase K to increase the overall DNA yield and reach highest sensitivity.

Content	Quantity
	Cat. No. 56-0002 (for 50 extractions)
Proteinase K	1 vial, lyophilized
Rehydration Buffer	1 vial (600 µl)

Working Temperature:

20 °C to 70 °C with an optimum from 50 to 56 °C.

Stability:

pH 4.0-12.5, no effect of denaturation agents like SDS or urea.

Inhibitors:

Hg²⁺ ions, DFP, PMSF and phenol.

No relevant inhibition by EDTA, sulfhydryl reagents or trypsin inhibitors.

Inactivation:

heat denaturation (20 min, 75 °C)

Instructions for Use

1. Add 550 µl Rehydration Buffer to the provided vial of Proteinase K.
2. Incubate at room temperature for 5 min. Vortex and spin the tube briefly to remove liquid from the lid.
3. Prepare aliquots if necessary.
4. Optional in combination with Venor®GeM Sample Preparation Kit (Minerva Biolabs) or Microsart® AMP Extraction Kit (Sartorius AG):

10 µl of Proteinase K solution are required to treat each sample immediately after addition of „Conditioner“ (Venor®GeM Sample Preparation Kit) or „Buffer A1“ (Microsart® AMP Extraction Kit). Continue as indicated in the respective manuals.

Storage

The lyophilized product must be stored at +2 to +8 °C. The rehydrated Proteinase K must be stored at ≤ -18 °C. Avoid repeated freezing and thawing. Preparation of aliquots might be required if more than 5 freeze/thaw cycles are necessary.

Germany:

Minerva Biolabs GmbH

Schkopauer Ring 13 | 12681 Berlin | Germany

Tel.: +49-30-2000437-0 | Fax: +49-30-2000437-9

E-mail: order@minerva-biolabs.com

Internet: www.minerva-biolabs.com

USA / Canada:

Minerva Biolabs Inc.

1 Jill Ct., Building 16, Unit 10

Hillsborough | NJ 08844 | USA

Phone: 1-908-524-4661

order@minervabiolabs.us | www.minervabiolabs.us