

GENERAL DNA/RNA EXTRACTION KIT

REF VIS100300

This manual must be read attentively and completely before using this product. If you have any problems, please contact our Technical Service Center for help.

INTENDED USE

GENERAL DNA/RNA EXTRACTION KIT is for DNA/RNA extraction from biological material (Serum, plasma, saliva, sputum, cerebrospinal fluid, amniotic fluid, urine, tissue, tears, stool, bronchoalveolar lavage, liquid-based cytology samples, nasopharyngeal swabs, oropharyngeal swabs, and cell culture samples) for general laboratory usage.

PRODUCT DESCRIPTION

GENERAL DNA/RNA EXTRACTION KIT is designed for purifying DNA/RNA from sample that is immediately ready for genomic analysis. GENERAL DNA/RNA EXTRACTION KIT offers simple, high yield, time-saving and innovative DNA/RNA purifying system with special buffers and spin column that is designed with latest technology. The advanced lysis system aims to disrupt the cell membrane, while wash buffer removes the contaminants and impurities successfully. The purified DNA/RNA can be used in downstream applications including Northern Blotting, Dot Blotting, in vitro translation, molecular cloning, PCR, and other analytical procedures.

PRODUCT CONTENTS

GENERAL DNA/RNA EXTRACTION KIT is composed of Lysis Buffer, Proteinase K, Proteinase K Buffer, Binding Buffer, Wash Buffer I, Wash Buffer II, Elution Buffer, Spin Column.

Kit Contents: For 100 Reactions	Kit Content	Volume/Pieces
	Lysis Buffer	20 ml x 1
	Proteinase K	20 mg x 1
	PK Buffer	1 ml x 1
	Binding Buffer	25 ml x 1
	Wash Buffer I	23 ml x 2
	Wash Buffer II	23 ml x 2
	Elution Buffer	6 ml x 1
	Spin Column	100 pieces

***Note:** It is suggested to use the buffer within 6 months after opening the vial.

SPECIMEN COLLECTION, HANDLING, AND STORAGE

CLSI MM13-A might be followed for adequate specimen collection, storage, and transport.

GENERAL DNA/RNA EXTRACTION KIT buffers are kept at room temperature (18-25 °C) before first use.

Proteinase K is delivered as lyophilized with Proteinase K dissolving buffer. After dissolving Proteinase K with Proteinase K Buffer, keep at -20 °C.

***Note:** Wear lab coat and gloves when working with buffers as the buffers contain chemicals irritant to human skin.

REQUIRED MATERIALS

- 1,5 ml nuclease-free tubes
- 10 µl, 100 µl, and 1000 µl Micropipettes
- 10 µl, 100 µl, and 1000 µl pipette tips
- Centrifuge
- Vortex
- Incubator

PROPERTIES

Sample: Body Fluids
 Operation time: 40 min. DNA/RNA Yield: Up to 30 ng

PREPARING SAMPLES

The body fluid samples are kept at 4°C. Prior to DNA/RNA extraction, the body fluid samples are homogenized by vortexing.

PROTOCOL

1. Add 200 µl body fluid samples, 200 µl **Lysis Buffer**, 10 µl **Proteinase K** into a 1.5 ml eppendorf tube by pipetting.
2. Mix the samples by vortexing for 10-15 seconds.
3. Incubate the mix on a heater at 65°C for 15 minutes.
4. Add 250 µl **Binding Buffer** and vortex for 10-15 seconds wait 5 min at RT.
5. Transfer the mix to spin column, centrifuge at 8000 rpm for 1 minute.
6. Transfer fluid from collection tube to spin column and centrifuge at 8000 rpm for 1 minute and discard the flow through.
7. Add 450 µl **Wash Buffer I**, centrifuge at 8000 rpm for 1 minute and discard the flow through.
8. Add 450 µl **Wash Buffer II**, centrifuge at 8000 rpm for 1 minute.
9. Centrifuge at 10.000 rpm at 2 minute and the change the collection tube with eppendorf tube and wait 1 minute.
10. Add 60 µl **Elution Buffer** and incubate at room temperature for 5 minute and centrifuge at 10.000 rpm for 1 minute.

***Note:** Prior to use add 1 ml PK Buffer into 20 mg/ml Proteinase K and mix by pipetting. Store Proteinase K mixture at -20 °C.

SUGGESTIONS

Prior to starting the protocol; Binding Buffer, Wash Buffer I, and Wash Buffer II might be cooled to reduce nucleic acid solubility.

QUALITY CONTROLS

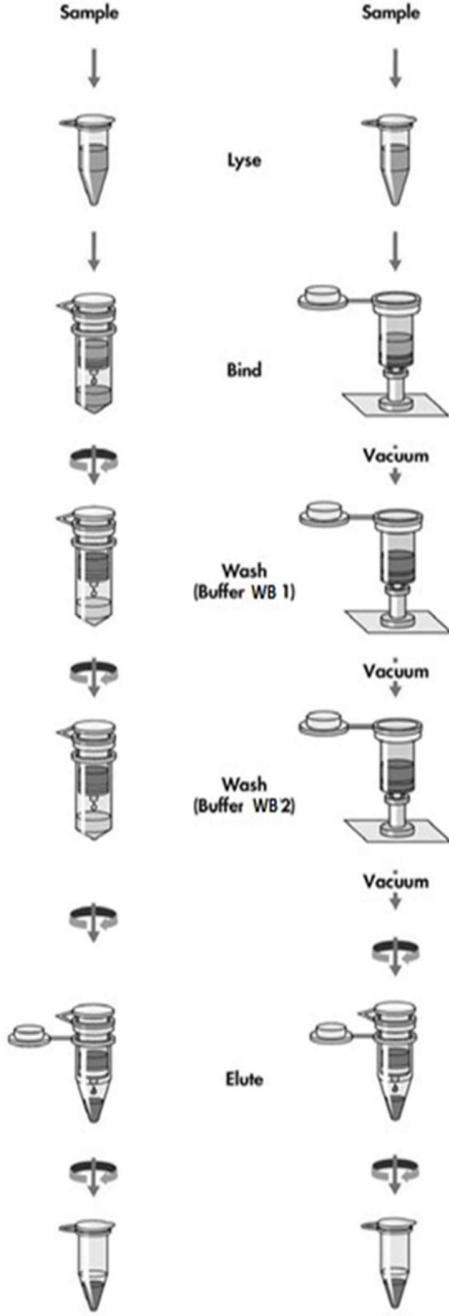
DNA/RNA concentration and purity are determined with UV Spectrophotometric measurements. The ratio of absorbance at 260 and 280 nm (A260/A280) is used to determine DNA/RNA purity. The A260/A280 ratio of 1.8 signifies pure DNA/RNA. However, a ratio between 1.8 and 2.0 is generally accepted as pure DNA/RNA. Extracted DNA/RNA is amplified for human genes by qPCR.

In Agarose Gel Electrophoresis the extracted DNA/RNA bands stained with ethidium bromide are visualized with UV.






SAFETY INSTRUCTIONS

GENERAL DNA/RNA EXTRACTION KIT contains hazardous content. Follow the safety instructions according to GHS Classification.
















FLOWCHART OF EXTRACTION



GHS CLASSIFICATION

Component	H- phrases	P- phrases
Lysis Buffer	H302, H314, H412, H308 	P260, P264, P270, P273, P280, P301+ P31, P301+ P330+ P303+ P361+ P353, P304+ P340 P305+ P351+ P338, P310, P321, P363, P405 P501
Binding Buffer	H225, H302, H315, H319, H336 	P261, P264, P301+P312 P302+ P352, P304 + P340 +P312, P305+P351+ P338, P264, P270, P280, P240, P241, P242
Wash Buffer 1	H225, H302, H315, H319, H336, 	P201, P202, P260, P501 P304 +P340, P233, P271 P305 +P351+P338, P280, P305 +P351+P338, P370+P378, P403+P233, P405
Wash Buffer 2	H226, H315, H319, H350, H361, H370 	P301+ P330+ P303+ P361+ P353, P304+ P340, P305+ P351+ P338, P310, P321, P363, P405, P501
Proteinase K	H315, H317, H319, H334, H335 	P261, P264, P271, P272, P280, P285, P302+P352, P304+P340, P304+P341, P305+P351+P338, P312, P321, P332+P313, P333 +P313, P337+P313, P342+P311 P362, P363, P403+P233, P405, and P501

LIST OF SYMBOLS

	Üretici		In vitro diagnostik tıbbi cihaz		Kullanma talimatına başvurun
	Son kullanma tarihi		Sıcaklık limiti (2-30°C)		Avrupa Topluluğu'nda yetkili temsilci
	Lot numarası		Tekrar kullanmayın		Nemden koruyun
	Katalog numarası		Ambalajı hasarlıysa kullanmayın		Güneş ışığından koruyun
	Üretim tarihi		CE işareti		<n sayıda> deney için yeterli miktar içerir

CONTACT

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