A&A BIOTECHNOLOGY
innovating life science

Manual

MagnifiQ™ 16 Pathogen instant kit

Kit for automated, magnetic isolation of DNA and RNA of pathogens in the 16 samples per plate format. Contains ready-to-use, reagent-filled plates and all necessary consumables.

catalog #	size	compatible devices *
607A-16U-64	64 isolations	Auto-Pure 32A
607A-16V-64	64 isolations	Auto-Pure Mini Auto-Pure S32
607A-16U-256	256 isolations	Auto-Pure 32A
607A-16V-256	256 isolations	Auto-Pure Mini Auto-Pure S32

*** Compatible devices**
The kit has been tested with specific Allsheng brand isolation devices. This does not preclude it from working with other devices. If your device is not listed, please contact us at info@aabiot.com.

For research use only.

Guarantee
A&A Biotechnology provides a guarantee on this product.
The company does not guarantee the correct performance of this kit in the event of:

- not adhering to the supplied protocol
- use of not recommended equipment or materials
- use of other reagents than recommended or which are not a component of the product
- use of expired or improperly stored product or its components

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Advantages

- Requires only a few minutes of manual work while adding the samples. The rest of the procedure is carried out in an automatic extraction device.
- It does not require the initial preparation of buffers. Just add prepared samples to the plate and after about 30 min you get extracted material.
- Universal extraction of both DNA and RNA.

Sample types

sample type	sample size
Animal tissue	up to 20 mg
Blood (fresh or frozen, plasma, serum), body fluids	up to 200 µl
Swab	1 pcs

Specification

protocol time	~ 30 min
elution volume	100 µl
elution solution	Tris buffer (10 mM, pH 8.5)
binding capacity	30 µg DNA/RNA
downstream applications	qPCR, RT-qPCR, sequencing

Description

MagnifiQ™ 16 Pathogen instant kit is designed for RNA and DNA isolation from viruses and Gram(-) bacteria. The isolated material is perfect for further analyzes and tests by qPCR and RT-PCR methods and for sequencing.

The **MagnifiQ™** product series is based on the automated isolation of nucleic acids with use of magnetic beads. This method significantly shortens working time and reduces risk of mistakes in comparison to manual methods.

Contents

	607A-16U-64		607A-16U-256		
component	**quantity**	**cat #**	**quantity**	**cat #**	**storage**
XP-G - extraction plate	4 pcs	K-P96U22XG	16 pcs	K-P96U22XG	15–25 °C
Proteinase K	1.5 ml	K-PRK-15A	6 ml	K-PRK-6	2–8 °C*
LTE 2X buffer	15 ml	K-LTE2X-15	55 ml	K-LTE2X-55	15–25 °C
tip comb 8	8 pcs	K-C8U-8	32 pcs	K-C8U-32	15–25 °C
protective film	4 pcs	K-MQF-4	16 pcs	K-MQF-16	15–25 °C

* Proteinase K can be stored at 15-25 °C for up to 12 months.

	607A-16V-64		607A-16V-256		
component	**quantity**	**cat #**	**quantity**	**cat #**	**storage**
XP-G - extraction plate	4 pcs	K-P96V22XG	16 pcs	K-P96V22XG	15–25 °C
Proteinase K	1.5 ml	K-PRK-15A	6 ml	K-PRK-6	2–8 °C*
LTE 2X buffer	15 ml	K-LTE2X-15	55 ml	K-LTE2X-55	15–25 °C
tip comb 8	8 pcs	K-C8U-8	32 pcs	K-C8U-32	15–25 °C
protective film	4 pcs	K-MQF-4	16 pcs	K-MQF-16	15–25 °C

* Proteinase K can be stored at 15-25 °C for up to 12 months.

Additional equipment and reagents

Necessary

- pipette
- pipette tips
- 1.5 ml Eppendorf tubes with lock (sample lysis)

Optional

- 8-channel pipette
- vortex
- sterile water, Tris buffer, PBS buffer

Material preparation

Animal tissue

1. Homogenize up to **20 mg** of animal tissue in the PBS or Tris buffer.
2. Centrifuge the sample for **1 min** at **500 RPM**.
3. Transfer **200 µl** of the supernatant to 1.5 ml Eppendorf tube with lock.
4. Add **200 µl** of **LTE 2X** buffer and **20 µl** of **Proteinase K.**
5. Vortex the sample for **10 s.**
6. Follow point 1. of the Extraction Protocol.

Blood (fresh or frozen, plasma, serum), body fluids

1. Transfer **200 µl** of the sample to 1.5 ml Eppendorf tube with lock.
2. Add **200 µl** of **LTE 2X** and **20 µl** of **Proteinase K**.
3. Vortex the sample for **10 s** and incubate for **10 min** at **50 °C** with shaking.

   Note. If automatic shaking is not available, mix the samples by inverting the tubes a few times.
4. Centrifuge for **20 s** at **10 000 RPM.**
5. **Attention.** In the Extraction Protocol, use the supernatant as the sample.

   Follow point 1. of the Extraction Protocol.

Swabs with transport medium

No additional material preparation is required.

1. Follow point 1. of the Extraction Protocol.

Dry swabs

1. Break or cut off part of the swab with the collected sample and place it in 1.5 ml Eppendorf tube with lock.

   Note. The portion of the swab with the collected sample should fit completely into the tube.

2. Add **500 µl** of sterile water, **Tris** buffer or PBS buffer.

   Note. Part of the swab with the sample should be completely immersed in the buffer.

3. Leave at room temperature for **10 min**.

4. Vortex for **10 s**.

5. Transfer **200 µl** of supernatant to new 1.5 ml Eppendorf tube with lock.

6. Add **200 µl** of **LTE 2X** buffer and **20 µl** of **Proteinase K.**

7. Follow point 1. of the Extraction Protocol.

Protocol

Protocol files

device	protocol name	protocol file	installation
Auto-Pure Mini	MQ-UNI-MI	aabiot.com/protocols/magnifiq/MI/MQ-UNI-MI.txt	1. Create folder "items" on a USB drive and copy the protocol file to it. 2. Insert the USB drive into a USB slot in the device. 3. On a device screen, go to Settings > System > Transfer >Import. 4. Select the protocol and tap "Import".
Auto-Pure Mini (QR code)	MQ-UNI-MI		1. On a device screen, go to Run > ☰ > ⊏⊐ 2. Scan the QR code with the device's scanner.
Auto-Pure 32A	MQ-UNI-32A	aabiot.com/protocols/magnifiq/32A/MQ-UNI-32A.txt	1. Create folder "items" on a USB drive and copy the protocol file to it. 2. Insert the USB drive into a USB slot in the device. 3. On a device screen, go to Settings > Im.&Export > Import. 4. Select the protocol and tap "Import."
Auto-Pure S32	MQ_UNI_S32	aabiot.com/protocols/magnifiq/S32/MQ_UNI_S32.txt	1. Create folder "im_export_protocols" on a USB drive and copy the protocol file to it. 2. Insert the USB drive into a USB slot in the device. 3. On a device screen, go to Protocols >Import. 4. Select the protocol and tap "Import".

Extraction protocol

1. Remove the foil from the **XP-G** plate from left to the right.

   Note: It is important to do this carefully so as not to mix buffers from different wells.

   Note: If possible, briefly spin before removing the foil.

2. Add **400 µl** of sample to each well in columns **1** and **7** of the **XP-G** plate.

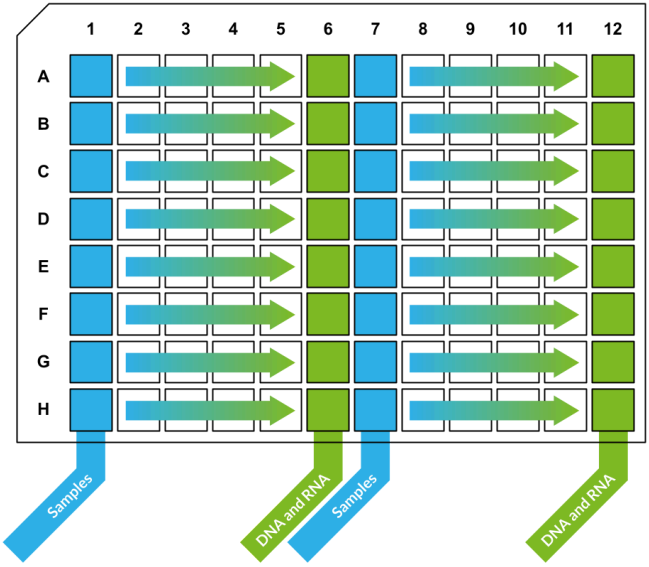
3. Place one or two **XP-G** plates in the extraction device.

4. Place the appropriate number of **tip combs 8** in the extraction device.

5. Run the protocol on your device.

6. After the program is over, remove the combs and then remove **XP-G plate** from the extraction device and seal it with **protective film**. The extracted DNA / RNA is located in columns **6** and **12** of the **XP-G** plate.

Note. For longer storage of extracted material, transfer it from the plate to appropriate tubes and store at 4 °C for DNA or -70 °C for RNA.



Safety information

DANGER

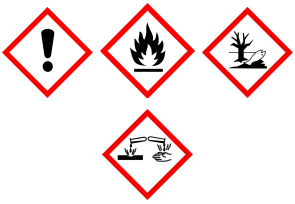
Proteinase K

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
P261 Avoid breathing dust.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+P311 If experiencing respiratory symptoms call a Poison Center or doctor/physician.

WARNING

LTE 2X

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



DANGER

XP-G - extraction plate

H225 Highly flammable liquid and vapor.
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P312+P330 If swallowed: Call a poison center/doctor/ if you feel unwell.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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