

#### Manual

# MagnifiQ<sup>™</sup> 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
607A-16U-256	256 isolations	Auto-Pure 32A
607A-16V-256	256 isolations	Auto-Pure Mini

\* 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 samples to the plate and after about 30 min you get extracted material.
- Universal extraction of both DNA and RNA.

#### Specification

protocol time	~30 min
sample type	swabs
sample size	up to 400 µl
elution volume	50-100 µl <sup>1</sup>
elution solution	Tris buffer
binding capacity	30 µg DNA and RNA
downstream applications	sequencing, qPCR, RT-PCR

<sup>1</sup>The elution volume prepared on the plate is 100 µl. To obtain a smaller elution volume, subtract the appropriate amount of elution solution from the wells of columns 6 and 12 on the XP-G plate. Attention! Do not reduce the elution volume below 50 µl.

#### Description

MagnifiQ<sup>™</sup> 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<sup>™</sup> 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 mistake in comparison to manual methods.

# Contents

	607A-16U-64		607A		
component	quantity	cat#	quantity	cat#	storage
<b>XP-G</b> - extraction plate	4 pcs	K-P96U22XG	16 pcs	K-P96U22XG	15-25 ℃
Proteinase K	1.5 ml	K-PRK-15A	6 ml	K-PRK-6	4-8 ℃*
tip comb 8	4 x 2 pcs	K-C8U-2	16 x 2 pcs	K-C8U-2	15-25 ℃
protective film	4 pcs	K-MQF-4	16 pcs	K-MQF-16	15-25 ℃

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

	607A-16V-64		607A		
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tip comb 8	4 x 2 pcs	K-C8U-2	16 x 2 pcs	K-C8U-2	15-25 ℃
protective film	4 pcs	K-MQF-4	16 pcs	K-MQF-16	15-25 ℃

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

#### Additional equipment and reagents

#### Necessary

- pipette
- pipette tips

#### Optional

- 2 ml Eppendorf tubes (sample lysis)
- 8-channel pipette
- vortex
- sterile water, Tris buffer, PBS buffer

# **Material preparation**

#### Swabs with transport medium

No additional material preparation is required.

#### Dry swabs

1.	Break or cut off part of the swab with the collected sample and place it in a 2 ml Eppendorf tube (not included). Note. The portion of the swab with the collected sample should fit completely into the tube.
2.	Add <b>500 µl</b> of sterile water, Tris buffer or PBS buffer. <b>Note.</b> Part of the swab with the sample should be completely immersed in the buffer.
3.	Vortex for <b>20 s</b>
4.	Follow point 1. <u>of the Protocol</u> .

# Protocol

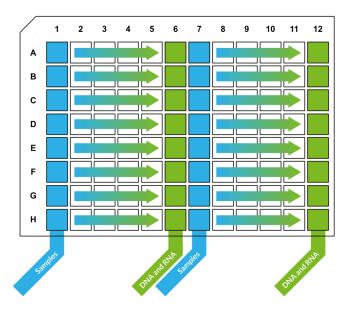
1.	Carefully centrifuge the XP-G plate for 1 min at 2000 RPM.
2.	Remove the foil from the <b>XP-G</b> plate.
3.	Add <b>200 - 400</b> $\mu$ l of samples to the wells in columns <b>1</b> and <b>7</b> of the <b>XP-G</b> plate. <b>Optional.</b> Add 20 $\mu$ l of Proteinase K to the wells in columns 1 and 7 of the XP-G plate.
4	Place one or two <b>XP-G</b> plates in the extraction device.
5.	Place the appropriate number of <b>tip combs 8</b> in the extraction device.
6.	Run the program according to the table below:

Step	Well	Name	Mix Time (min)	Magnet (s)	Wait Time (min)	Volume (µl)	Mix Speed (1-10)	Temp. (° C)
1	1	LYSIS	5.0	0	0.0	900	4	50
2	5	BEADS	0.5	30	0.0	600	5	OFF
3	1	BIND	5.0	60	0.0	900	6	OFF
4	2	WASH1	2.0	30	0.0	600	6	OFF
5	3	WASH2	1.0	30	0.0	600	6	OFF
6	4	WASH3	1.0	30	5.0	600	6	OFF
7	6	ELUTION	6.0	60	0.0	100	8	65
8	3	DROP	1.0	0	0.0	600	5	OFF

7.

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 and 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  $^{\circ}$ C for DNA or -70  $^{\circ}$ C for RNA.



# Safety information

	Proteinase K
$\wedge \wedge$	H315 Causes skin irritation.
	H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
•	H335 May cause allergy of astillina symptoms of breatiling difficulties in inflated.
$\mathbf{v}$	P261 Avoid breathing dust.
DANGER	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.
	XP-G - extraction plate
	H225 Highly flammable liquid and vapor. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
$\bullet$	H314 Causes severe skin burns and eye damage.
$\mathbf{v}$ $\mathbf{v}$	H412 Harmful to aquatic life with long lasting effects.
<b>^</b>	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 Avoid release to the environment.
P	P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
<u> </u>	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.
DANGER	P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
2, toEn	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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