

## Manual

# MagnifiQ™ 96 Pathogen instant kit

Kit for automated, magnetic isolation of DNA and RNA of pathogens in the 96 samples per plate format. Contains ready-to-use, reagent-filled plates and all necessary consumables.

catalog #	size	compatible devices *
607A-96V-960	960 isolations	Auto-Pure 96

**\* Compatible devices**

The kit has been tested with ThermoFisher Scientific KingFisher Flex and Allsheng Auto Pure 96 devices. This does not preclude it from working with other devices. If your device is not listed, please contact us at [info@aabiotech.com](mailto:info@aabiotech.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+RNA
downstream applications	qPCR, RT-qPCR, sequencing

<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 on the EP plate. Attention! Do not reduce the elution volume below 50 µl.

## Description

**MagnifiQ™ 96 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 mistake in comparison to manual methods.

# Contents

960 isolations			
component	quantity	cat #	storage
CP - comb plate	1 pcs	K-P96V22C	15–25 °C
SP - sample plate	10 pcs	K-P96V22SA	15–25 °C
WP 1 - wash 1 plate	10 pcs	K-P96V22W1A	15–25 °C
WP 2-3 - wash 2-3 plate	20 pcs	K-P96V22W23A	15–25 °C
BP - beads plate	10 pcs	K-P96V22BA	15–25 °C
EP - elution plate	10 pcs	K-P96V05EA	15–25 °C
Proteinase K	22 ml	K-PRK-22	4–8 °C*
tip comb 96	5 x 2 pcs	K-C96V-2	15–25 °C
protective foil	10 pcs	K-MQF-10	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

### Optional

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

## 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 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. Vortex for 20 s.

4. Follow point 1. [of the protocol.](#)

## Protocol

Before the isolation procedure, all plates should be centrifuged for **1 min** at **1000 RPM**. Centrifuge to remove remaining solution from the top of the protective foil.

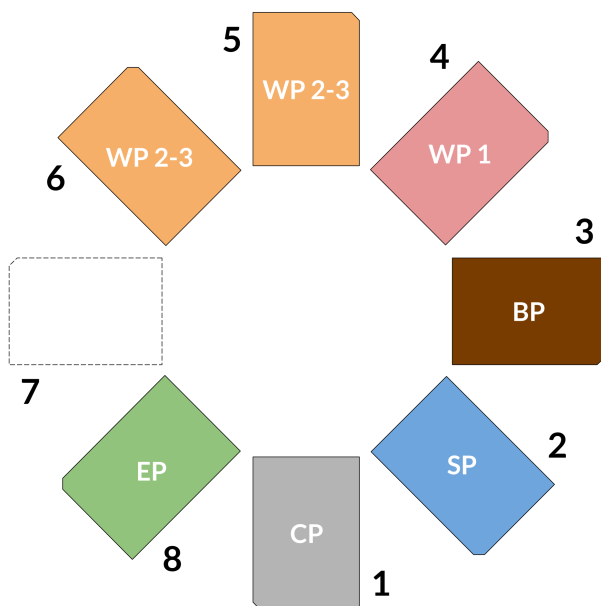
1. Remove the foil from the **SP** plate.

2. Add 200-400 µl of samples to the wells of the **SP** plate.

**Optional.** Add 20 µl of Proteinase K to the wells of the SP plate.

3. Place **96 tip comb** into the **CP** plate.

4. Remove the adhesive foil from the rest of the plates. Place the plates on the working table of the extraction device according to the scheme:



6. Run the program according to the table below:

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

7. After the program is over, remove the **EP** plate from the extraction device and seal it with **protective foil**.

**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.

8. Remove the rest plates, except the **CP** plate. The **CP** plate can be used many times.

## 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.



**DANGER**

### WP 1 plate, WP 2-3 plate

H225 Highly flammable liquid and vapor.  
 H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/ spray.  
 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.  
 P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+P313 If eye irritation persists: Get medical advice/ attention.

### SP plate



**DANGER**

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.  
 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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