A&A BIOTECHNOLOGY
innovating life science

*Manual*

# MagnifiQ™ 16 NGS Clean Up instant kit

Kit for automated, magnetic DNA cleanup after PCR and other enzymatic reactions using restriction enzymes, ligase, kinase, etc. Clean up of DNA for next-generation sequencing in the 16 samples per plate format. Contains ready-to-use, reagent-filled plates and all necessary consumables.

| catalog # | size | compatible devices * |
|---|---|---|
| 621A-16U-64 | 64 isolations | Auto-Pure 32A |
| 621A-16V-64 | 64 isolations | Auto-Pure Mini<br>Auto-Pure S32 |
| 621A-16U-256 | 256 isolations | Auto-Pure 32A |
| 621A-16V-256 | 256 isolations | Auto-Pure Mini<br>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

# Table of Contents

# Advantages

- MagnifiQ™ 16 NGS Clean Up instant kit does not require initial preparation of buffers. Just add samples to the plate and get extracted material within approximately 20 minutes.
- Fast, high efficiency automated isolation of DNA fragments .

# Specification

| | |
|---|---|
| **protocol time** | ~20 min |
| **sample type** | PCR products |
| **sample size** | up to 50 µl |
| **elution volume** | 50 µl |
| **elution solution** | Tris buffer |
| **binding capacity** | 20 µg DNA |
| **downstream applications** | PCR, sequencing, NGS sequencing |

# Description

**MagnifiQ™ 16 NGS Clean Up instant kit** is designed for automated DNA fragment isolation from enzymatic reaction mixtures (including PCR reactions, restriction enzyme digestion, kinase digestion, ligation, etc.). The isolated material is perfect for further analyzes and tests by PCR and real-time PCR methods and for sequencing including NGS sequencing.

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

# Contents

| | 621A-16U-64 | | 621A-16U-256 | | |
|---|---|---|---|---|---|
| **component** | **quantity** | **cat #** | **quantity** | **cat #** | **storage** |
| **XP-NGS -** extraction plate | 4 pcs | K-P96U22XNGS | 16 pcs | K-P96U22XNGS | 15–25 °C |
| **Tris** buffer | 4 ml | K-TRIS-4 | 15 ml | K-TRIS-15 | 15–25 °C |
| **tip comb 8** | 4 x 2 pcs | K-C8U-2 | 16 x 2 pcs | K-C8U-2 | 15–25 °C |
| **protective film** | 4 pcs | K-MQF-4 | 16 pcs | K-MQF-16 | 15–25 °C |

| | 621A-16V-64 | | 621A-16V-256 | | |
|---|---|---|---|---|---|
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| **tip comb 8** | 4 x 2 pcs | K-C8U-2 | 16 x 2 pcs | K-C8U-2 | 15–25 °C |
| **protective film** | 4 pcs | K-MQF-4 | 16 pcs | K-MQF-16 | 15–25 °C |

# Additional equipment and reagents

## Necessary

- automated pipette
- pipette tips

# Material preparation

DNA fragments shorter than **100 bp** are not retained in the eluates! Any type of dsDNA fragment in the range minimum length of **200 bp** are isolated and retained with the efficiency above 80%. DNA fragments, including PCR products, enzymatic digestion or modification fragments, cloning inserts etc. can be processed as follows:

1. Prepare the **50 µl** of DNA fragment sample (e.g. PCR products).

   **Attention.** If the volume of the sample is lower add the Tris buffer to reach the final volume of **50 µl.**

2. Follow point 1. of the Protocol.

# Protocol

1. Carefully centrifuge the **XP-NGS** plate for **1 min** at **2000 RPM.**

2. Remove the foil from the **XP-NGS** plate.

3. Add **50 µl** of samples to the wells in columns **1** and **7** of the **XP-NGS** plate.

4. Place one or two **XP-NGS** plates in the extraction device.

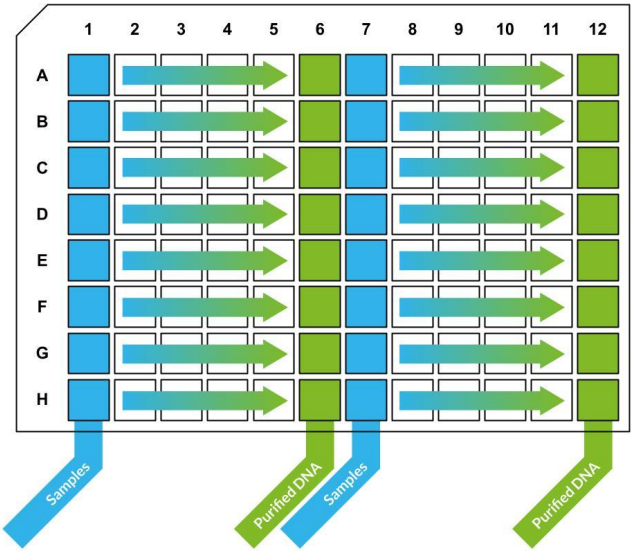
5. Place the appropriate number of **tip combs 8** in the extraction device.

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 | BIND | 4.0 | 60 | 0.0 | 200 | 3 | OFF |
| 2 | 2 | WASH1 | 1.0 | 40 | 0.0 | 600 | 4 | OFF |
| 3 | 3 | WASH2 | 1.0 | 40 | 0.0 | 600 | 4 | OFF |
| 4 | 4 | WASH3 | 1.0 | 40 | 3.0 | 600 | 4 | OFF |
| 5 | 6 | ELUTION | 4.0 | 60 | 0.0 | 50 | 4 | 37 |
| 6 | 3 | DROP | 0.5 | 0 | 0.0 | 600 | 5 | OFF |

7. After the program is over, remove the combs and then remove **XP-NGS** plate from the extraction device and seal it with **protective film**. The purified DNA is located in columns **6** and **12**.

**Note.** For longer storage of extracted material, transfer it from the plate to appropriate tubes, close tight and store at 4 °C.




# Safety information

## XP-NGS - extraction 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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