



A&A BIOTECHNOLOGY
innovating life science

Clean-Up 96-well

Kit for DNA cleanup after PCR and other enzymatic reactions
using restriction enzymes, ligase, kinase, etc.

version 1116

192 isolations

Cat. # 021-192

The binding capacity of the purification well – up to 20 µg of DNA,
the minimum binding capacity – 2 µg of DNA (below 2 µg of DNA we recommend using of Clean-Up Concentrator Kit).

DNA fragments range – from 100 bp to 10 000 bp.

Typical DNA recovery – 60–90%.

Elution volume – 30–50 µl.

Kit Contents

Component	192 isolations	Store at
Purification plates	2 pcs	Room Temp.
Receiving plates	2 pcs	Room Temp.
Elution plates	2 pcs	Room Temp.
Self adhesive foil for 96-well plate	2 pcs	Room Temp.
Reservoirs	3 pcs	Room Temp.
GI binding solution	105 ml	Room Temp.
A1 wash solution	190 ml	Room Temp.
Sodium acetate (3 M, pH 5.5)	2 x 1 ml	Room Temp.
TE buffer	12 ml	Room Temp.

It's not necessary to remove the mineral oil overlay if added to the enzymatic reaction mixture.

Equipment and materials necessary for DNA purification that are not included in the kit

1. DNA sample after enzymatic reactions
2. Sterile water (nuclease free, DEPC treated) (cat. # 003-075, 003-25, 003-500) (option)
3. Sterile 1,5 ml Eppendorf tubes
4. Microcentrifuge with rotor for 96-well plates
5. Vortex (option)

NOTE:

Before you start working, we recommend cleaning the work surface using LabZAP™ product (cat. # 040-500)

A&A Biotechnology provide one year guarantee on this kit

The company does not guarantee correct work of this kit in the event of:

*not adhere to the protocol supplied

*not recommended the use of equipment and materials

*the use of other reagents than recommended or which are not a component kit

*the use of expired or improperly stored reagents and disposables

Purification protocol

1. Mix DNA samples (max 100 µl) with 5 volumes of G1 binding solution. Mix by inverting the tubes or vortexing.

Binding solution G1 contains the colour pH indicator.

Upon mixing the DNA sample with binding solution G1, yellow colour of the mixture indicates an optimal pH for DNA binding.



optimal
condition
 $\text{pH} \leq 7.2$

If the mixture colour turns pink, pH of the solution is too high.

In such conditions DNA binds inefficiently to the silica membranes and may be lost.

If the colour of the solution is pink adjust the pH by adding 1–10 µl of 3M sodium acetate solution (pH 5.5) (included) and mix.

As soon as the colour of the mixture turns yellow, proceed with the purification protocol.



too high
pH

It is not necessary to remove the mineral oil overlay if added to enzymatic reaction mixture.



2. Place the purification plate on the receiving plate.
3. Apply the samples onto the wells in the purification plate.
4. Centrifuge for 1 min at 2000 x g.
5. Carefully separate the plates.
Discard the filtrates and again assemble the plates.
6. Add 600 µl of A1 wash solution.
7. Centrifuge for 2 min at 2000 x g.
8. Carefully separate the plates.
Discard the filtrates and again assemble the plates.
9. Add 300 µl of A1 wash solution.
10. Centrifuge for 10 min at 2000 x g.

11. Carefully separate the plates. Remove the receiving plate.
Place the purification plate on the elution plate.
12. Add 50 µl of TE buffer or sterile water (not included) directly onto the wells.

While applying the elution liquid (TE buffer or sterile water) into the well be sure that liquid is applied precisely onto the membrane.
If some of liquid stays on the plate walls the elution may not be effective.
Elution in a smaller volume is less efficient, but the extracted DNA has a higher concentration. Elution in 50 µl volume is more efficient, but DNA has a lower concentration.

13. Incubate for 3 min at room temp.
Centrifuge for 3 min at 2000 x g.
13. Carefully remove the purification plate.
Stick the adhesive foil on the elution plate.
The purified DNA store at +4 °C to +8 °C.

Safety information

 <p>DANGER</p> <p>A1 wash solution H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking. P261 Avoid breathing vapours. P305+P351+P338 If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p>	 <p>WARNING</p> <p>G1 binding solution 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.</p>
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