

Quick Start

GenElute™-E FFPE Deparaffinization Solution

For deparaffinization of FFPE samples for subsequent isolation of DNA and RNA with commercially available isolation kits.

EC900

Intended Use

For deparaffinization of up to four slices of FFPE sample per purification to be used with silica nucleic acid isolation kits for isolation of DNA and/or RNA.

Storage and Stability

GenElute™-E FFPE Deparaffinization Solution should be stored at room temperature. Use the solution within 12 months of receipt.

Important: The GenElute™-E Deparaffinization Solution has a freezing point of 18 °C. Solution with precipitate, or in a solid aggregate state, must be heated in a water bath to 25–35 °C to melt and mixed before use.

Materials and Equipment Needed

Kit Contents

Deparaffinization Solution

Not Supplied with Kit

- Microcentrifuge with rotor for 1.5 mL and 2 mL reaction tubes.

Important: Set centrifuge to relative centrifugal force, rcf (x g). If needed, calculate equivalent rpm by the formula:

$$\text{rpm} = 1,000 \times \sqrt{(g / (1.12 \times r))},$$

where r = radius of rotor in mm
and g is the required g-force.

- Thermal shaker with agitation (full speed at 800–1500 rpm).
Alternative: Heating Block or heat chamber.
- Vortex device.
- Pipets for 10 µL and 200 µL scales, corresponding pipet tips.
- One reaction tube (1.5 mL) per sample for down-stream lysis.

Preparation before starting

- Heat a thermomixer.

Standard Protocol

1. Cut FFPE slices from your FFPE sample with a microtome.
2. Place 2–4 FFPE slices in the bottom of a 1.5 mL reaction tube.
Note: Depending on the tissue and the age of the FFPE block, more slices might be needed to ensure adequate yield.
3. Add 3–5 drops of Deparaffinization Solution to the FFPE slices.
4. The FFPE slices dissolve immediately. Add enough solution to completely cover the FFPE slices.
5. Add the lysis buffer and, subsequently, the protease from your DNA or RNA purification kit to the sample according to the instructions provided by your kit supplier.
6. Vortex the reaction mixture for 10 seconds.
7. Place the reaction mixture in the thermomixer and incubate with agitation (1000 rpm) at recommended time and temperature of lysis for isolation kit being used. The tissue from FFPE slices is dissolved and the solution becomes clear.
If using Heating Block or heat chamber, vortex halfway through incubation time to re-suspend, and return to incubation.
8. Increase the temperature to 90 °C and further incubate for an additional 10 minutes.
9. Remove the mixture from the thermomixer. Centrifuge the reaction tube for 2–3 min at full speed. The emulsion will separate into two clearly separated phases.

- Transfer the lower aqueous phase containing the nucleic acids to a new 1.5 mL reaction tube.

Note: Discard the upper, orange phase, which contains the paraffin.

- Continue with the DNA or RNA nucleic acid purification according to the instructions provided by your kit supplier.

Consider the following:

- If working with a DNA purification kit: Start with the transfer to the spin column (binding step).
- If working with a RNA purification kit: Add ethanol following the instructions of your kit supplier. Continue with the transfer to the spin column (binding step).

Precautions and Disclaimer

This product is for Research use only. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Notice

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Product Ordering

Purchase online at SigmaAldrich.com/products.

| Description | Qty | Catalogue No. |
|--|--------------|---------------|
| GenElute™-E FFPE Deparaffinization Solution | 10 mL | EC900-10ML |
| | 100 mL | EC900-100ML |
| GenElute™ FFPE DNA Purification Kit | 50 reactions | DNB400 |
| GenElute™ FFPE RNA/DNA Purification Plus Kit | 50 reactions | RDP200 |
| GenElute™ FFPE RNA Purification Kit | 50 reactions | RNB400 |

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

Technical Assistance

Visit the tech service page on our web site at SigmaAldrich.com/techservice.

Standard Warranty

The applicable warranty for the products listed in this publication may be found at SigmaAldrich.com/terms.

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