



Instructions for use

ROTI® Histofix ECO Plus

8907

Formalin-free fixing medium - substitute for formalin

ROTI®Histofix ECO Plus is an aqueous solution containing the active ingredient hexamethylenetetramine.

The solution has a strong disinfecting and fixing effect. It is an adequate substitute for formalin.

In contrast to formalin, ROTI®Histofix ECO Plus has decisive advantages:

- The solution is **not toxic**.
- The proteins are **reversibly cross-linked**.
- The **morphology** of the cells and the cell components remains **largely intact**.
- **No artifacts** such as shrinkage or hardening occur.

After fixation with ROTI®Histofix ECO Plus the tissue remains in an almost native state. Therefore, typical tissue structures can be visualised much more distinctly.

Due to the reversible cross-linking, the proteins remain intact. This is especially relevant to

- DNA/RNA analyses in molecular biology
- Antigen/antibody reactions in immunohistochemistry

Formulation

ROTI®Histofix ECO Plus contains, in addition to the active ingredient hexamethylenetetramine, approx. 2.0 % alcohols (of which approx. 0.5 % methanol) for better penetration of the tissue and other additives in low concentrations.

The fragrances contained in the solution do not influence the fixing process and further processing. They are only added in extremely low concentrations and increase the safety of the product.

The pH value of the solution is 4.5 to 5.

Application

The treatment of the tissue samples is similar to that of formalin fixation:

Add the sample to ROTI®Histofix ECO Plus as soon as possible after taking it. The sample should be max. 5-10 mm thick and 2-3 cm long. The volume of the solution should be 20 to 30 times the sample volume.

The average infiltration rate at room temperature is 1-2 mm per hour. The time may vary depending on temperature and tissue type. For samples that are > 5 mm thick, we recommend overnight fixation.

You can accelerate the fixing process by heating (e.g. in the microwave).
However, fixation at room temperature is more gentle.

The ideal working range for the solution is in the pH range from 4.5 to 6.5. If the sample material shifts the fixing process too much into the basic range (> 6.8), we recommend using ROTI®Histofix ECO Plus in a larger surplus.

Further processing

Tissue fixed with ROTI®Histofix ECO Plus can be processed in the usual way:

- Dehydrate with organic solvents
- Paraffin embedding
- Common staining methods

Due to the gentle fixation, the original structure of the cells and the intercellular spaces is largely preserved, so that further histochemical and molecular biological analyses are possible.

Storing

The solution is stored at room temperature. It has a shelf life of at least 3 years.

 **Warning** H317

Full text of hazard- and precautionary statements
see material safety data sheet section 2.2

ROTI®Histofix ECO Plus

500 ml	plastic	8907.1
2,5 l	plastic	8907.2
5 l	plastic	8907.3

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