# PurifyLater Tissue Stabilizer

for convenient and safe protection of DNA and RNA in human and animal tissues samples against nucleolytic degradation

Product no. (volume)	030-002-100 (100 mL)	030-002-500 (500 mL)
Kit contents	Tissue Stabilizer Solution	
Related products	EchoLUTION Tissue DNA Micro Kit 010-002-050 (50)	
	Ceramic blade scalpel 050-002-001	Pestles 050-004-100

#### Storage

Storage:Room temperature (15–25°C)Stability:Minimum of 3 years at recommended storage temperatures

#### Safety information

PurifyLater Tissue Stabilizer is a non-hazardous reagent. It does not require any special treatment for disposal. Use conventional lab protective clothing. For explicit safety information please request SDS (<u>QA@bioecho.de</u>).

#### Introduction

PurifyLater Tissue Stabilizer inhibits nucleolytic degradation of nucleic acids in human and animal tissues which otherwise takes place during storage in untreated tissue samples. Tissues treated with PurifyLater can be used for long-term storage at -20 °C or -80 °C or up to four weeks at 4 °C until extraction of nucleic acids is performed, followed by any molecular analysis (e.g. PCR, NGS, etc.). PurifyLater Stabilizer is compatible with all standard nucleic acid extraction kits including the BioEcho EchoLUTION Tissue DNA Micro Kit (recommended).

#### Materials and equipment needed:

- Vortex mixer
- One reaction tube (1.5 mL) per sample for up to 50 mg of tissue
- Recommended for cutting of tissue: corrosion-free BioEcho Ceramic Blade Scalpel, e.g., product no. 050-002-001

#### Preparations before starting

- Fill 1.5 mL reaction tube with Tissue stabilizer solution (1 mg of tissue per 10  $\mu L$  of stabilizer solution).

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#### Preparations before starting

• Fill 1.5 mL reaction tube with Tissue stabilizer solution (1 mg of tissue per 10 µL of stabilizer solution).

## **PROTOCOL:**

 Cut tissue sample from donor preferentially using a corrosion-free ceramic blade scalpel.

**Note:** The diameter of the tissue sample should not exceed 0.5 cm (0.2 inch) to allow rapid diffusion into and stabilization of the PurifyLater Stabilizer also of inner parts of the sample. Larger diameters of the sample may lead to gradually higher degradation of nucleic acids in the center of the sample. The smaller the sample pieces, the higher the stabilization effect within the sample piece. If feasible, cut tissue into thin slices.

- 2. Transfer sample immediately into the stabilizer solution. **Make sure that the sample is completely submerged.** If sample pieces stick to the tube wall, vortex to transfer them into the liquid.
- 3. Store samples at least 4 h or (recommended) over night at 4 °C to ensure complete diffusion of the stabilizing liquid into the tissue.

**Note**: Soft tissues like kidney, liver and lung will leach blood into the stabilizer solution. The supernatant will therefore turn reddish. For better retrieval of the tissue pieces at a later point, the stabilizer solution can be exchanged with fresh stabilizer if needed.

- 4. Stabilized samples can be stored for an indefinite time at −20°C or −80°C or up to 4 weeks at 4 °C.
- 5. For later purification, use the EchoLUTION Tissue DNA Micro Kit (Product no. 010-002-050). If using another tissue purification kit, follow the instructions according to the kit manufacturer's protocol.

**Note**: The nucleic acid recovery of PurifyLater-stabilized samples and fresh tissue is comparable. Before using stabilized tissue samples for nucleic acid extraction, remove excess Stabilizer liquid attached to the tissue surface.

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