



EchoLUTIONTM

Tissue RNA Kit

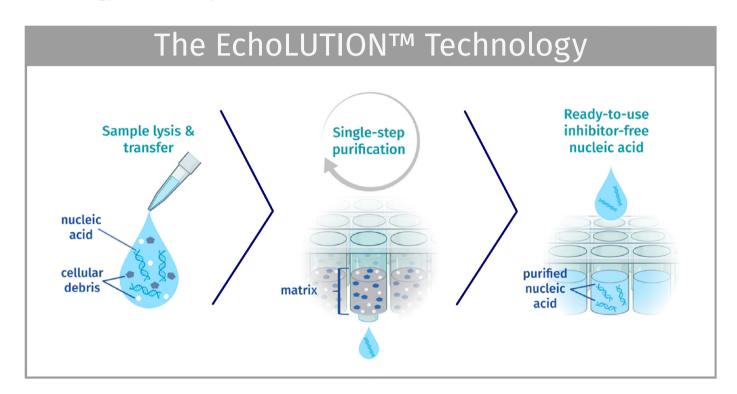


High-quality RNA with no phenol/chloroform

High-quality RNA with no phenol/chloroform

The EchoLUTION Tissue RNA Kit is intended for easy, rapid, and efficient RNA extraction from mammalian tissue samples (liver, muscle, spleen, lung, and nervous tissues). Our EchoLUTION technology allows the extraction of nucleic acids in a single step after sample homogenization and ultra-fast lysis.

The excellent yield and purity of total RNA obtained with the EchoLUTION Tissue RNA Kit makes it perfectly suited for downstream applications such as RT-qPCR and RNA-seq. Like this, it gives researchers and scientists in drug discovery, sequencing, and/or basic research, such as oncology, immunology, and transcriptomics a solution at hand.

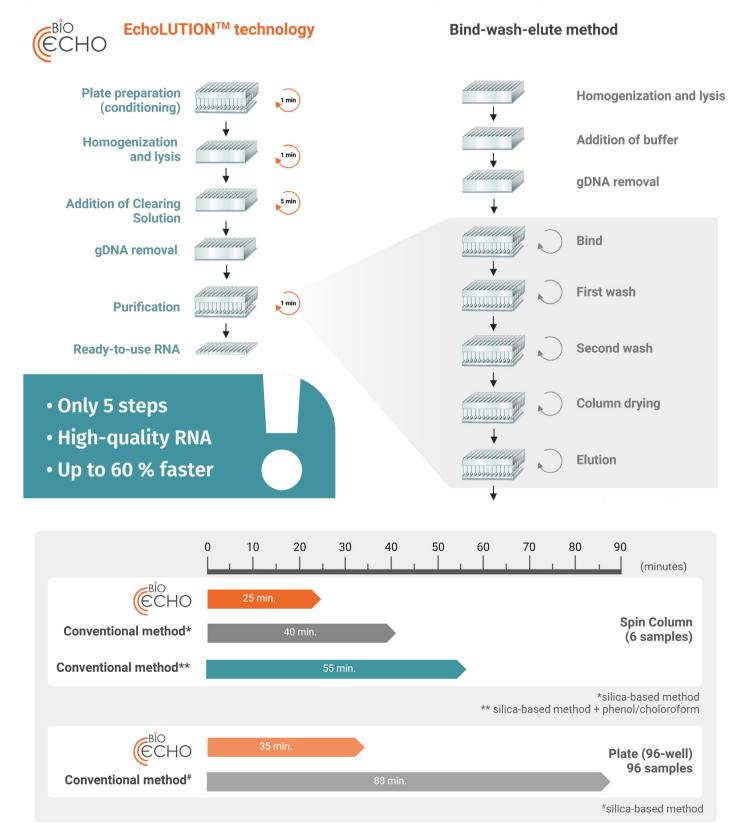


The EchoLUTION™ Tissue RNA Kit provides:

Convenience and speed	Single-step purification allows complete extraction of 96 samples within 35 minutes.
High compatibility	Suitable for extraction of total RNA from fresh-frozen or stabilized mammalian tissues, including challenging tissues such as muscle
High sensitivity	Highly pure total RNA free of contaminants and inhibitors
Reliable results	High purity and competitive RNA integrity perfectly suited for downstream applications such as RT-qPCR and RNA-seq
Sustainability	Up to 54 % less plastic consumption compared to other extraction methods and eliminating the need to use TRIzol®/chloroform.

The workflow: faster and fewer steps

The single-step purification technology from BioEcho reduces the hands-on time and total number of steps. Combined with an ultra-fast lysis, it allows the RNA extraction of 6 samples to be completed within 25 minutes (spin column format) or a 96-well plate within 35 minutes. The plate kit can be used manually, as well as in semi- or fully automated systems.



High integrity

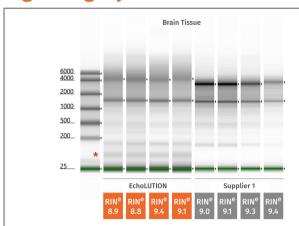


Figure 1. Comparable integrity of the RNA extracted from brain tissue with EchoLUTION Tissue RNA Kit and a silica-based kit (plate format). The electrophoretic separation of the RNA indicates that the EchoLUTION Tissue RNA Kit allows the extraction of small RNAs below 200 nt (*). The RINe data were obtained with TapeStation®.

Superior purity

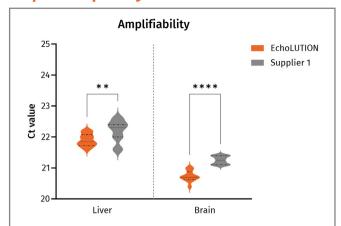


Figure 2. High purity with EchoLUTION Tissue RNA Kit. RT-qPCR of the *DDX5* gene expression displays lower Ct values with EchoLUTION than with another supplier. The better amplifiability indicates higher RNA purity and no presence of inhibitors with the EchoLUTION Tissue RNA Kit.

Go green with EchoLUTION™: less plastic and liquid waste

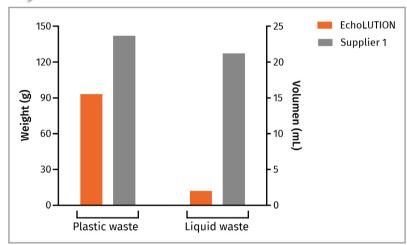


Figure 3. Tissue RNA extraction with BioEcho saves one third in plastic waste and generates 90 % less liquid waste. The graph depicts the amount of plastic and total hazardous liquid waste generated with the EchoLUTION Tissue RNA Kit (plate format) and a silica-based method. We included all plastic components like reagent bottles, bags, plates, foils, and pipette tips to determine the total plastic waste. Additionally, we calculated the number of tips needed for reagent transfers using an 8-channel pipette. Column height represents the total waste generated for the RNA extraction of 96 samples.

The spin column kit even saves up to 54 % of plastic waste as compared to established silica-based methods (data not shown).

Specifications at a glance



Sample input: up to 10 mg of tissue (fresh-frozen, stabilized), depending on tissue type



Processing: Manual through centrifugation/(semi)automated with liquid handler/robot



Expected yield: Up to 8–14 μg (depending on tissue type and input)



RNA quality: RIN 6.5-9



Output volume: 80 μL



Downstream compatibility: RT-PCR, RT-qPCR, RNA-seq



Ordering information

Product	Reactions	Product no.
EchoLUTION Tissue RNA Kit (50) EchoLUTION Tissue RNA Kit (250)	50 250	011-015-050 011-015-250
EchoLUTION Tissue RNA Kit (2 x 96) EchoLUTION Tissue RNA Kit (8 x 96)	2 x 96 8 x 96	011-115-002 011-115-008
Homogenization Set (50) Homogenization Set (250)	50 250	030-006-050 030-006-250
Homogenization Set (2 x 96) Homogenization Set (8 x 96)	2 x 96 8 x 96	030-006-102 030-006-108
Steel Beads, 4 mm (2,000 beads)* Steel Beads, 4 mm (10,000 beads)*	2,000 beads 10,000 beads	050-006-002 050-006-010
Tube & Cap Strips (8 racks of 96)*	8 racks of 96	060-002-008
Lysis Plate 96, Type 1 (8 plates)*	8 plates	060-003-008
Conditioning Plate 96 (2 plates)** Conditioning Plate 96 (8 plates)**	2 plates 8 plates	060-001-002 060-001-008
Conditioning Plate 96 - A (2 plates)** Conditioning Plate 96 - A (8 plates)**	2 plates 8 plates	060-007-002 060-007-008

^{*} Steel Beads, Tube & Cap Strips, and Lysis Plate 96, Type 1 are not included in the kit.

These components are used for sample homogenization and can be purchased separately or as part of the Homogenization Set.



contact@bioecho.de



www.bioecho.com



orders@bioecho.de

orders_us@bioecho.com



BioEcho Life Sciences GmbH Biocampus Cologne, Main Building Nattermannallee 1 50829 Köln/Cologne, Germany BioEcho Life Sciences, Inc. 400 Tradecenter Drive, Suite 6900 Woburn, MA 01801 United States



is a trademark of BioEcho Life Sciences GmbH, Germany. TRIzol® is a registered trademark of Molecular Research Center, Inc., ©2024 by BioEcho Life Sciences GmbH | Rev. 001 | The BioEcho logo is a registered trademark and EchoLUTION™ is a trademark of BioEcho Life Sciences USA. Tapestation® is a registered trademark of Agilent Technologies, USA. I Images partly created with BioRender.com | Cover image: stock.adobe.com

^{**}For sustainability reasons, Conditioning Plates are not included in our kits. These plates are reusable and can be purchased separately. For automated workflows, use Conditioning Plate 96 - A.