BIO ECHO Life Sciences

EchoCLEAN

DNA & RNA Cleanup Kits

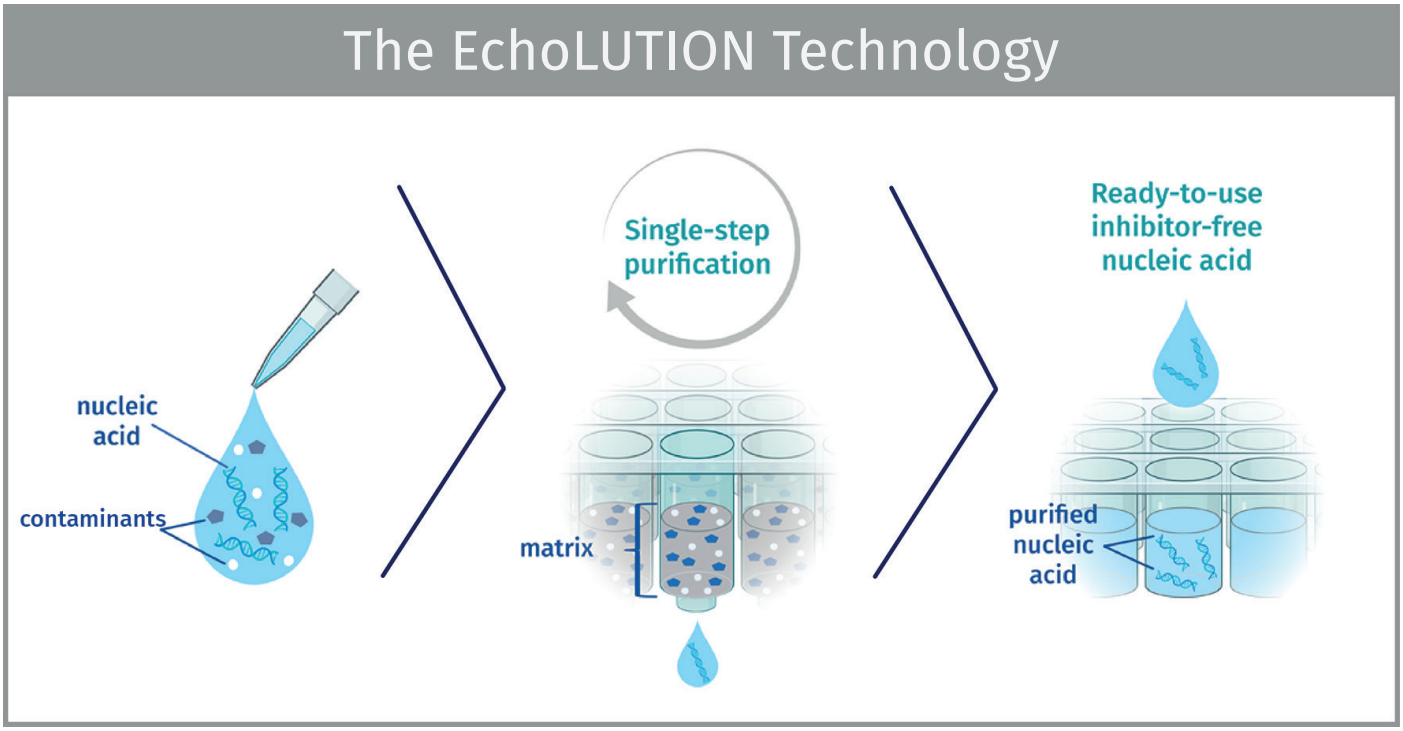
Get rid of impurities in DNA & RNA samples in a single step

The Nucleic Acid Experts.

Get rid of impurities in DNA & RNA samples in a single step

Molecular genetic analysis and applications such as RT-PCR or next-generation sequencing (NGS) for DNA and RNA require a high-quality nucleic acid input. However, depending on the DNA and RNA extraction method used, these nucleic acids can contain traces of organic solvents, salts, or dyes that inhibit downstream applications. The EchoCLEAN Cleanup Kits are based on the single-step purification EchoLUTION technology and remove impurities and inhibitors from DNA and RNA samples in less than 10 minutes without using additional buffers.

The EchoLUTION Technology



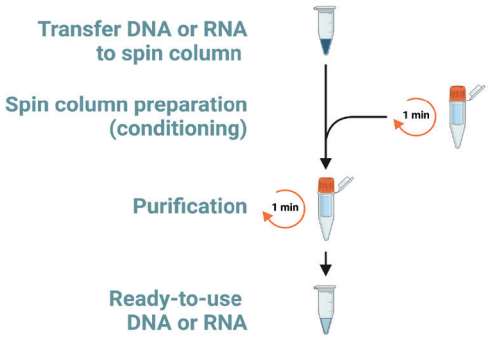
The EchoCLEAN Cleanup Kits provide:

Convenience and speed	Single-step clean up allows complete process in less than 10 minutes.
High compatibility	Suitable for clean up of DNA and RNA.
High sensitivity	Highly pure DNA and RNA free of primers, phenols, contaminants, and inhibitors.
Reliable results	Clean up of DNA and RNA without using organic solvents, such as ethanol, or additional buffers results in inhibitor-free nucleic acids suitable for downstream applications such as PCR, NGS, and RNA-seq.
Sustainability	Up to 70% less plastic consumption compared to other extraction methods and no usage of hazardous reagents.

The workflow: faster and fewer steps

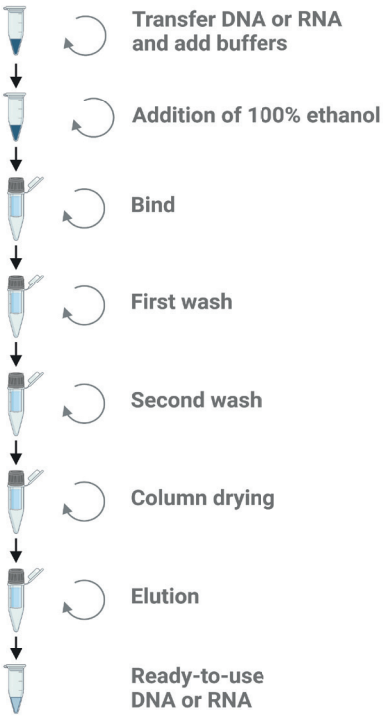
The single-step purification and reduced number of total steps allow the clean up of nucleic acids in less than 10 minutes.

EchoLUTION technology

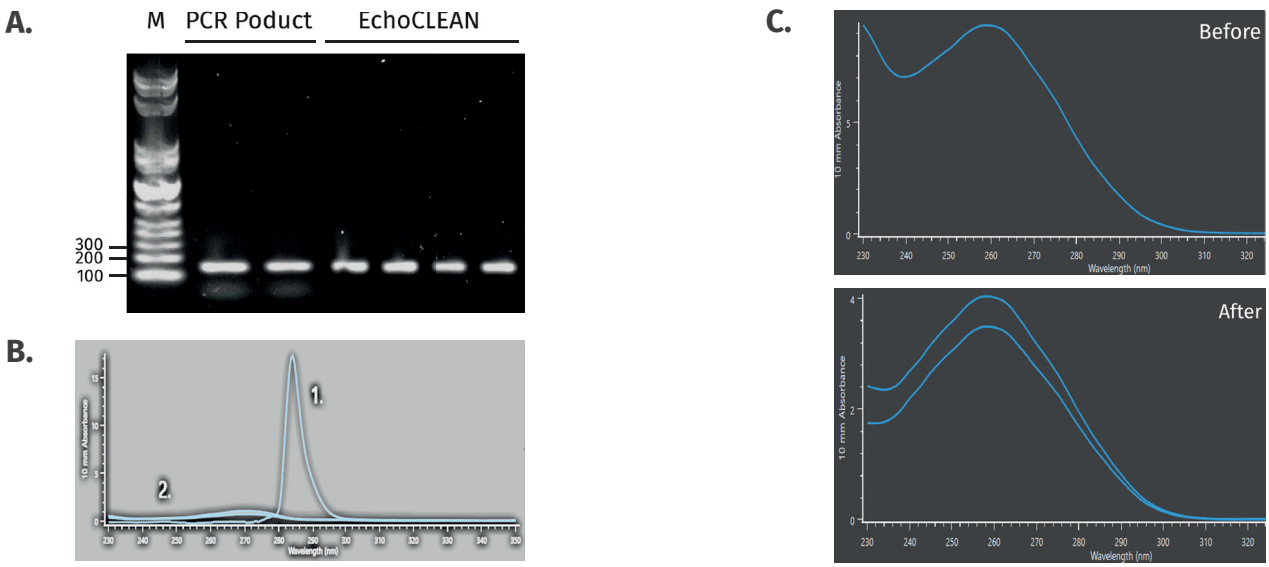


- Only 2 steps needed
- No additional buffers required
- Whole workflow 10 x faster

Bind-wash-elute (silica) method



EchoCLEAN Cleanup Kits efficiently remove primers and organic compounds



A. Four samples were cleaned with the EchoCLEAN DNA CleanUp Kit (for DNA >50 bp) to remove primers from the PCR product of ~200 bp. **B.** (1) DNA sample extracted with a phenol-chloroform method shows a high absorbance peak at 285 nm wavelength due to phenol traces. (2) The organic solvent contamination was removed after cleaning the sample with the EchoCLEAN Organic Solvent DNA Cleanup Kit. **C.** Spectrophotometric analysis showed that RNA extracted with a trizole-based protocol had an A_{260}/A_{230} ratio of ~0.9 (upper image). After using the EchoCLEAN RNA Cleanup Kit, the absorbance ratio was increased to values around the expected ratio of 2.0 (lower image). These results show an increase in RNA purity.

Select a kit based on your needs

	Impurities to be removed												
	Organic Solvents					Salts		Dyes			Others		
Kit	Phenol	Trizol	Chloroform	Ethanol	Chaotrophs	Salts	SDS	Sodium azide	Indigo	Gel loading	Primers	dNTPs	Precipitates
EchoCLEAN DNA Cleanup Kit (for DNA >50 bp)				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EchoCLEAN Organic Solvent DNA Cleanup Kit	✓	✓	✓	✓	✓	✓							✓
EchoCLEAN RNA Cleanup Kit	✓	✓	✓	✓	✓	✓							✓

	Application					
Kit	Phenol-based extraction	Desalting of nucleic acids	Post silica-based extraction	PCR clean up	Enzymatic reaction clean up	Buffer exchange
EchoCLEAN DNA Cleanup Kit (for DNA >50 bp)		✓	✓	✓	✓	✓
EchoCLEAN Organic Solvent DNA Cleanup Kit	✓	✓	✓			✓
EchoCLEAN RNA Cleanup Kit	✓	✓	✓			✓

Ordering information

EchoCLEAN Cleanup Kits	Reactions	Product no.
EchoCLEAN DNA Cleanup Kit (for DNA >50 bp) (10) EchoCLEAN DNA Cleanup Kit (for DNA >50 bp) (50) EchoCLEAN DNA Cleanup Kit (for DNA >50 bp) (250)	10 rxn 50 rxn 250 rxn	020-002-030-010 020-002-030-050 020-002-030-250
EchoCLEAN Organic Solvent DNA Cleanup Kit (10) EchoCLEAN Organic Solvent DNA Cleanup Kit (50) EchoCLEAN Organic Solvent DNA Cleanup Kit (250)	10 rxn 50 rxn 250 rxn	020-002-040-010 020-002-040-050 020-002-040-250
EchoCLEAN RNA Cleanup Kit (10) EchoCLEAN RNA Cleanup Kit (50) EchoCLEAN RNA Cleanup Kit (250)	10 rxn 50 rxn 250 rxn	020-002-050-010 020-002-050-050 020-002-050-250

+49 221 998897-0
orders@bioecho.de
contact@bioecho.de
www.bioecho.de
BioEcho Life Sciences GmbH
Biocampus Cologne, Main Building
Nattermannallee 1
50829 Köln/Cologne, Germany