

EchoCLEAN DNA & RNA CleanUp Kits

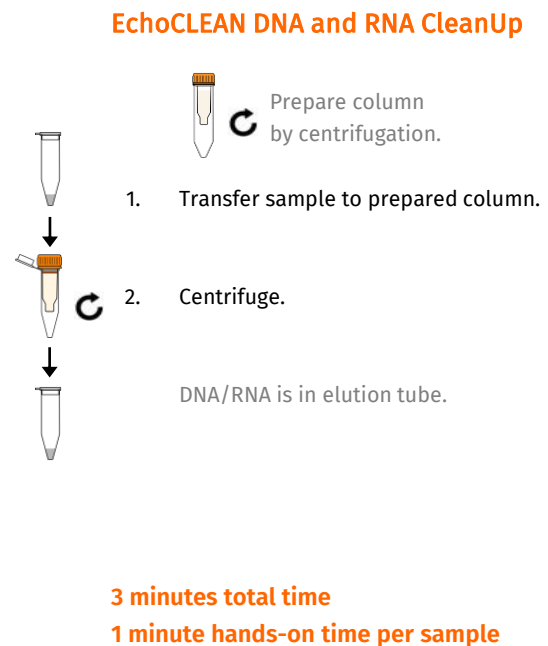
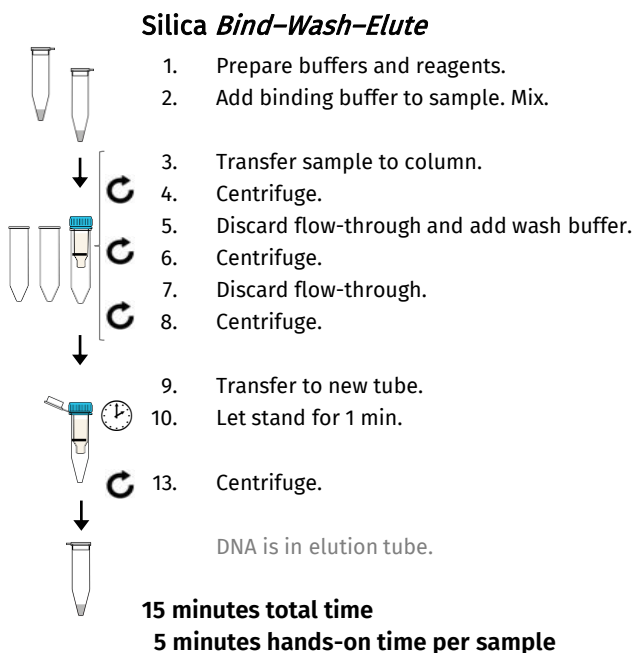
For single-step spin column DNA or RNA CleanUp in just 3 minutes

Genomic research and DNA analyses such as PCR and NGS require high-quality nucleic acids as starting material. BioECHO strives to improve traditional sample preparation workflows by providing faster and more convenient procedures that lead to superior work results. Our one-step technology allows to clean DNA or RNA solutions from unwanted contaminants or to simply change the formulation or buffer conditions of your nucleic acid solution. The result is unmet DNA/RNA purity within a fraction of the time of other methods, with minimal hands-on interaction and in an eco-friendly manner.

EchoCLEAN CleanUp kits provide

- A **complete range of CleanUp products** for quick removal of any impurity
- **Optimal preparation of DNA and RNA for downstream performance** in NGS, PCR, other enzymatic reactions
- Maximized purity by removal of contaminants over a wide range of reagents:
 - Salts**, metal ions, **chaotrophs**, other small molecules – **(oligo)nucleotides** – **organic solvents** and dyes
- Much **faster preparation** – 1/5 the hands-on time, fewer steps
- 70% less plastic waste, no toxic chemicals, plastic-free packaging – **the sustainable way !**

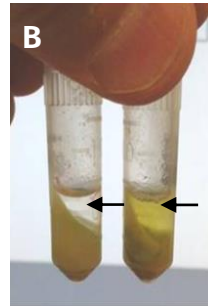
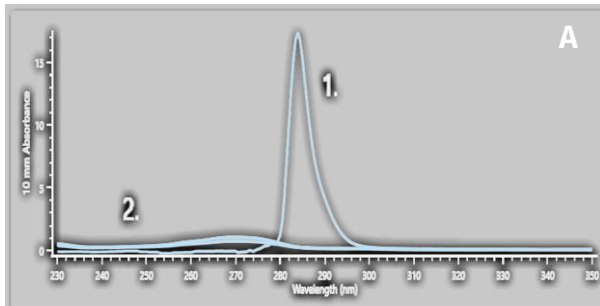
5x Faster preparation time & fewer steps



The revolutionary new EchoCLEAN workflow increases the convenience of genomic sample clean-up significantly. Clean your DNA or RNA with maximal recovery to unmet purity in a fraction of the time compared to traditional Silica *bind-wash-elute* procedures! Reliably remove all unwanted impurities which may disturb your downstream applications! The EchoCLEAN principle is independent of a binding event to a membrane and, therefore, of a binding capacity: the DNA or RNA remains untouched and all of it flows through the column in a single step.

Removal of Organic Solvents

DNA prepared by traditional methods frequently contains residual phenol and/or chloroform. EchoCLEAN completely eliminates such impurities.



A, The aqueous phase from a mock phenol/chloroform-based extraction of DNA was analysed spectrophotometrically (1). After EchoCLEAN clean-up, the phenol peak has been eliminated (2; in duplicate). Instead of a single absorption at 285 nm, phenol can also form several peaks at various wavelengths.
B represents a typical aqueous phase of a phenol/chloroform-based DNA extraction (see ←).

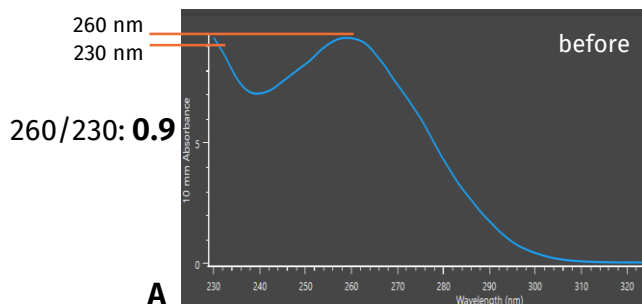
- Complete removal of phenol from DNA solutions
- Complete removal of residual ethanol or traces of any other organic solvent

EchoCLEAN products are ideally suited for a reliable clean-up when a universal preparation for NGS library prep is desired or required. Any enzymatic downstream reaction can then be performed without any worries.

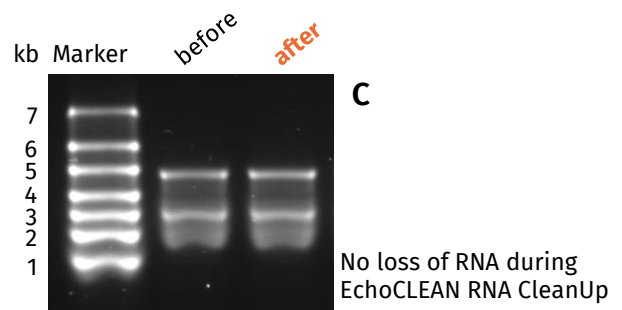
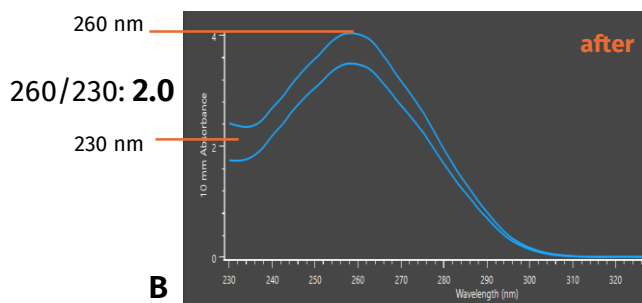
RNA CleanUp

- Complete removal of phenol from RNA
- Also eliminates salts residual ethanol or traces of any other organic solvent
- Maximized purity ($OD_{260/230} \geq 2.0$)

The EchoCLEAN RNA CleanUp Kit is the product of choice whenever RNA is to be used in downstream applications that include enzymatic activities, especially upon phenol-based extraction! After EchoCLEAN CleanUp, enzymatic downstream reactions can then be performed without any inhibition.



EchoCLEAN



Total RNA preparations by using Trizol (Supplier Q) have been spectrophotometrically analyzed before and after using EchoCLEAN RNA CleanUp Kit. The OD 260/230 nm ratio has been improved from 0.9 to the optimal range of ≥ 2.0 (—) while all RNA was recovered (C). The EchoCLEAN RNA CleanUp kit may not quantitatively recover small RNAs (e. g., miRNA, snRNA, tRNA)!

Ordering information

EchoCLEAN CleanUp Kits	Reactions	Product No.
EchoCLEAN DNA CleanUp Kit (for DNA > 50 bp) For single-step primer removal and desalting of DNA in just 3 minutes (recovers DNA > 50 bp)	10	020-002-030-010
	50	020-002-030-050
	250	020-002-030-250
EchoCLEAN Organic Solvent DNA CleanUp Kit For single-step clean-up of DNA from organic solvents in just 3 minutes; also suitable for desalting (recovers DNA > 50 bp)	10	020-002-040-010
	50	020-002-040-050
	250	020-002-040-250
EchoCLEAN RNA CleanUp Kit For single-step clean-up of RNA from organic solvents, salts and chaotrophs in just 3 minutes	10	020-002-050-010
	50	020-002-050-050
	250	020-002-050-250

BioEcho's growing portfolio of nucleic acid extraction and CleanUp kits further comprises the products listed below. For reagents and accessories and for availability of test kits for additional applications, please refer to www.bioecho.de.

EchoLUTION nucleic acid extraction kits	Reactions	Product No.
EchoLUTION Blood DNA Kit For single-step purification of genomic DNA from up to 60 µl liquid blood (human or animal) and dried blood (e. g., FTA cards), yielding up to 2 µg of highly pure DNA suitable for all molecular biology applications	10	010-001-010
	50	010-001-050
	250	010-001-250
EchoLUTION Tissue DNA Micro Kit For single-step purification of genomic DNA from 0.1 to 10 mg of animal tissue, yielding up to 40 µg highly pure DNA suitable for all molecular biology applications	10	010-002-010
	50	010-002-050
	250	010-002-250
EchoLUTION CellCulture DNA Kit For purification of genomic DNA from up to 2•10 ⁶ cultured cells (cell lines and primary cells), yielding up to 50 µg of highly pure DNA suitable for all molecular biology applications	10	010-006-010
	50	010-006-050
	250	010-006-250
ReDUCE DNA/RNA concentration		
ReDUCE DNA Concentrator (for quick, up to 20-fold volume reduction)	10	040-011-010
	50	040-011-050
ReDUCE RNA Concentrator (for quick, up to 20-fold volume reduction)	10	040-012-010
	50	040-012-050



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