



# **EchoLUTION**

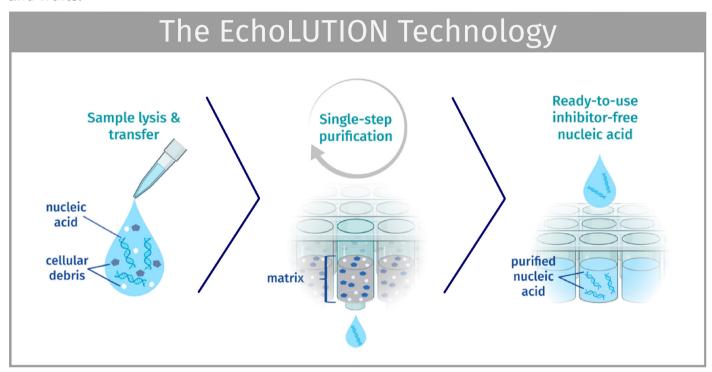
**Plant DNA Kit** 



Extract high-quality plant DNA even from difficult samples

#### Extract high-quality plant DNA even from difficult samples

Plant molecular genetic analysis based on genotyping, microarrays, and next-generation sequencing (NGS) is fundamental for breeding and crop science research. However, to guarantee a reliable result for these applications, researchers and breeders need high-quality plant DNA. Our EchoLUTION technology allows the extraction of nucleic acids in a single step after sample lysis. The combination of this revolutionary method and a lysis step performed under physiological conditions enables the extraction of high yield plant genomic DNA in a short time. The EchoLUTION Plant DNA Kit is compatible with different plant species and tissues such as leaves, roots, seeds, and fruits.



### The EchoLUTION Plant DNA Kit provides:

Convenience and speed

Single-step purification allows complete extraction of 96 samples within one and a half hours.

High compatibility

Suitable for a wide range of plant species such as strawberry, parsley, tomato, potato, wheat, barley, and many others.

High sensitivity

Highly pure genomic DNA free of contaminants and inhibitors.

Reliable results

Lysis under physiological conditions results in long and intact DNA fragments perfectly suited for downstream applications such as PCR and NGS.

Sustainability

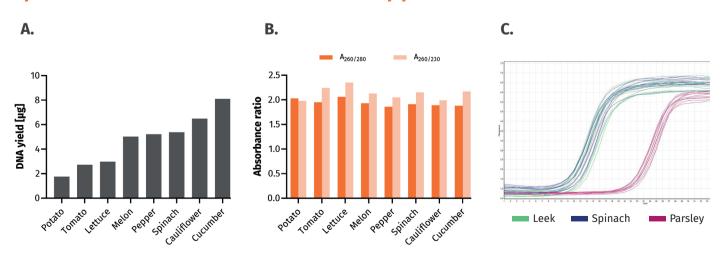
Up to 70% less plastic consumption compared to other extraction methods and no usage of hazardous reagents.

#### The workflow: faster and fewer steps

The single-step purification and reduced number of total steps allow the DNA extraction of 96 plant samples to be completed within one and a half hours.

#### Bind-wash-elute (silica) method **EchoLUTION technology** Sample disruption Sample disruption Lysis and incubation Lysis and incubation Removal of cellular debris Addition of Clearing Solution Addition of buffer Plate preparation (conditioning) **Bind Purification** First wash Ready-to-use DNA ######## Second wash Single-step purification Column drying Half the hands-on time **Elution** Ready-to-use DNA

## Inhibitor-free and high-yield plant DNA from different plant species suitable for downstream applications



Extraction of plant genomic DNA from different plant species performed with the EchoLUTION Plant DNA Kit. **A.** Spectrophotometer quantification of plant DNA concentration. **B.** DNA quality from the extracted plant samples as determined by spectrophotometric analysis. Data support that the EchoLUTION technology allows the extraction of high-yield and high-quality plant DNA. **C.** qPCR results show amplification and no inhibition for every plant species (n = 12) as expected for the selected genetic marker.



#### **Ordering information**

EchoLUTION Plant DNA Kits	Reactions	Product no.
EchoLUTION Plant DNA Kit (10) EchoLUTION Plant DNA Kit (50) EchoLUTION Plant DNA Kit (250)	10 rxn 50 rxn 250 rxn	010-003-010 010-003-050 010-003-250
EchoLUTION Plant DNA 96 Kit (2 x 96) EchoLUTION Plant DNA 96 Kit (8 x 96) EchoLUTION Plant DNA 96 Core Kit (8 x 96)	2 x 96 rxn 8 x 96 rxn 8 x 96 rxn	010-103-002 010-103-008 010-103-108

We have tested and have very good experiences with BioEcho's Plant 96 kit. The consumption of plastic is less and the extraction process on our Cybio-Felix robot is faster and simpler than before.

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