



magnetiQ

Plant DNA Extraction Kit

Galenvs magnetiQ Plant DNA Extraction Kit is a rapid and simple extraction and purification protocol for plant DNA. The extraction kit has been validated with tomato, tobacco, strawberry, cannabis, pine, mint, and lemon leaves. The extraction protocol consists of 6 steps with each kit containing (i) lysis, (ii) binding buffer, (iii) wash #1 buffer, (iv) wash #2 buffer(2X), and (v) elution buffers. The protocol is completed within 20 min and is amenable for low and high-throughput semi-automated workflow. The extraction protocol requires a benchtop vortex and centrifuge (14,000 rpm) for the lysis step.

The kit is available in bottle formats allowing for processing of 50 (PD0050) and semi automated for processing of 16 (PD0016). Kits can be stored at room temperature for 6 months post-manufacture date.

Applications

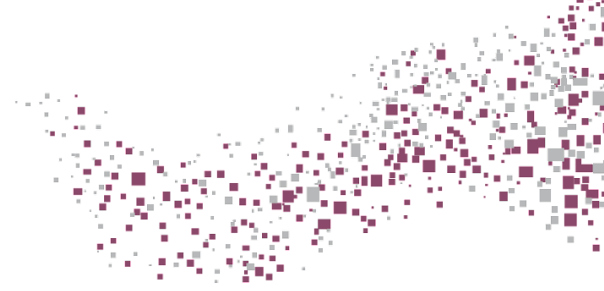
- Quantification via qPCR
- Next Generation Sequencing (NGS)
- Plant-Gender Screening

Performance

Galenvs magnetiQ Plant DNA Extraction Kit's performance was evaluated yield and quality assessment of the extracted genomic DNA from a variety of plant leave samples, compared to two widely used, industry-leading kits:

- Qiagen DNeasy Plant Pro Kit (Qiagen)
- OmegaBioTek E.Z.N.A. Plant DNA Kit (Omega)

50 mg of plant leaves were prepared according to prepared as per manufacturer instructions and following the MagnetiQ Plant DNA Kit protocol.



Yield

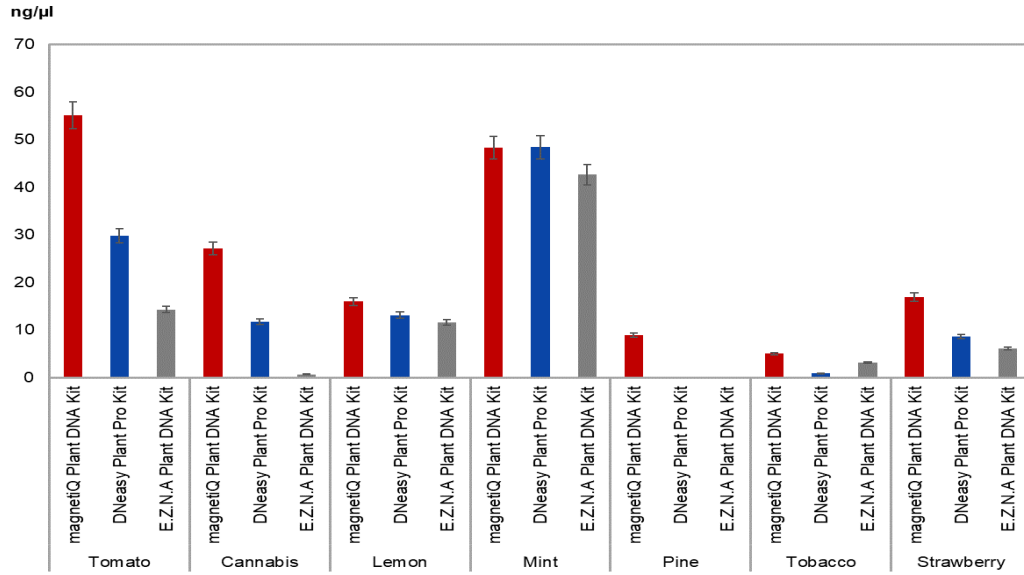


Figure1: Extract more high-quality genomic DNA

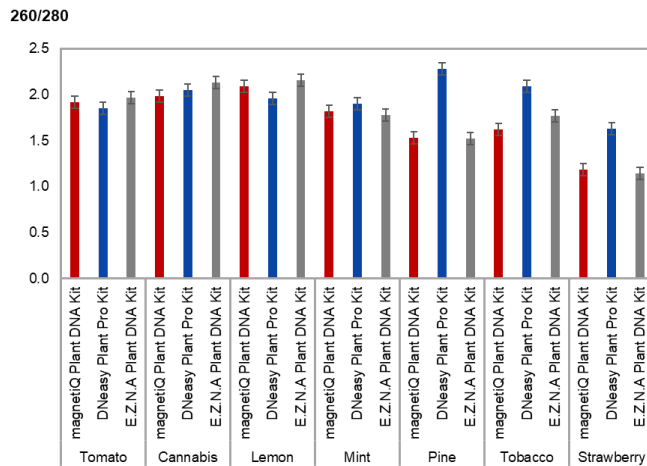


Figure2: DNA purity from different plant leaves

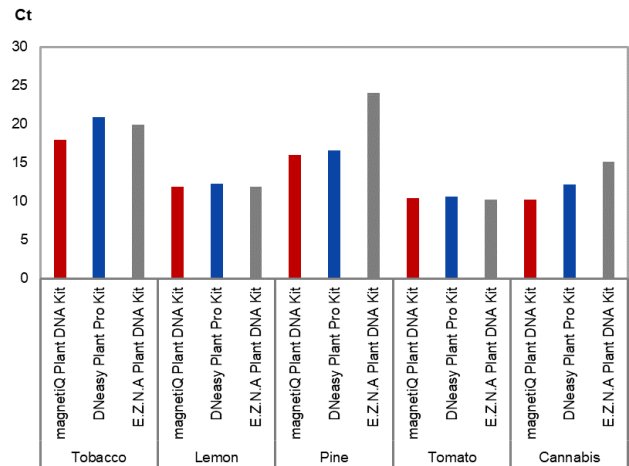


Figure3: Efficient removal of PCR inhibitors



Gel Electrophoresis

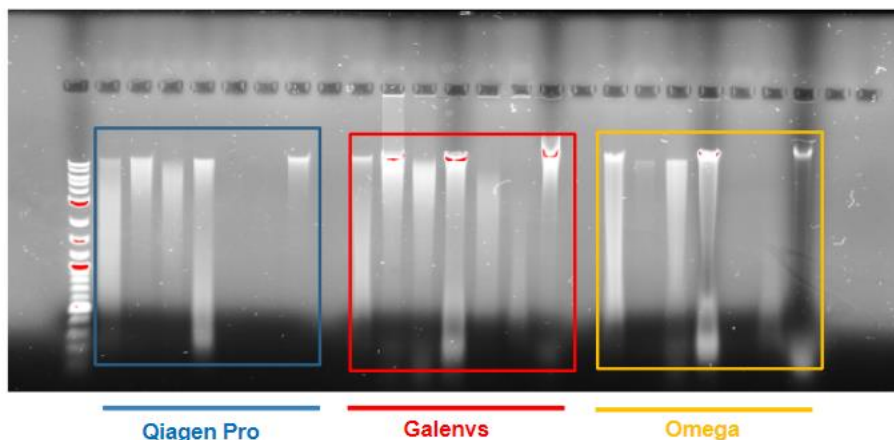
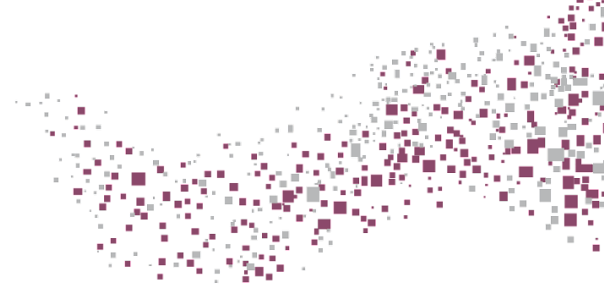


Figure 3: Strong gel bands show high-quality DNA yields with *MagnetiQ* Plant DNA Kit (from left to right: Tomato, Cannabis, Lemon, Mint, Pine, Tabacco, Strawberry)

For the tested samples, the MagnetiQ Plant DNA Kit outperformed the other commercial kits in terms of extracted DNA yield with high purity (A260/280). qPCR results show also corresponding lower C_T values and efficient inhibitor removals. Results are confirmed by 1% agarose gel electrophoresis showing high-quality DNA yields across the variety of plant leaves.

Specifications

Main sample type	Plant samples
Quantity	50 assays/ ready-to-use prefilled plates (16 prep)
Elution Volume	100µl
DNA Recovery	99%
Processing Mode	Manual/Semi Automated
Processing Technology	Magnetic Beads
Components	(i) lysis, (ii) binding buffer, (iii) wash #1 buffer, (iv) wash #2 buffer, and (v) elution buffer.
Storage	Room Temperature



Product codes

50 preps	PD0050
Prefilled plates 16-well	PD0016

