



# magnetiQ

## Plant RNA Extraction Kit

### Introduction

Galenvs *magnetiQ Plant RNA Extraction Kit* is a rapid (50min) and simple (11 steps) extraction and purification protocol for Tomato, Tobacco, Strawberry, Cannabis, Pine, Mint, and Lemon leaves. The kit is amenable to automated parallel processing.

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), (v) elution buffers, (vi) DNase treatment, (vii) Binding buffer, (viii) Wash buffer (2x), and (ix) Elution.

Galenvs *magnetiQ Plant RNA Extraction kit* requires only a benchtop vortex and centrifuge (14,000 rpm) for the lysis step. All subsequent steps do not require benchtop equipment.

The kit is available in bottle formats allowing for processing of 50 (PR0050) and semi-automated for processing of 16 (PR0016). Kits can be stored at room temperature for 6 months post-manufacture date.

### Applications

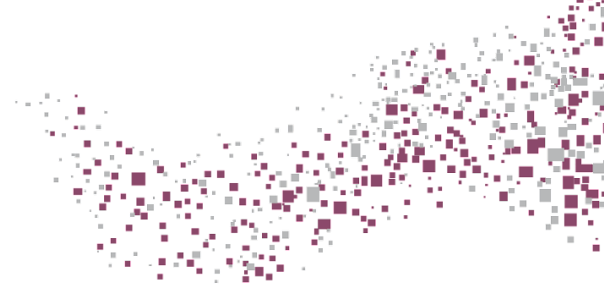
- Quantification via qPCR
- Next Generation Sequencing (NGS)
- Plant-Gender Screening

### Performance

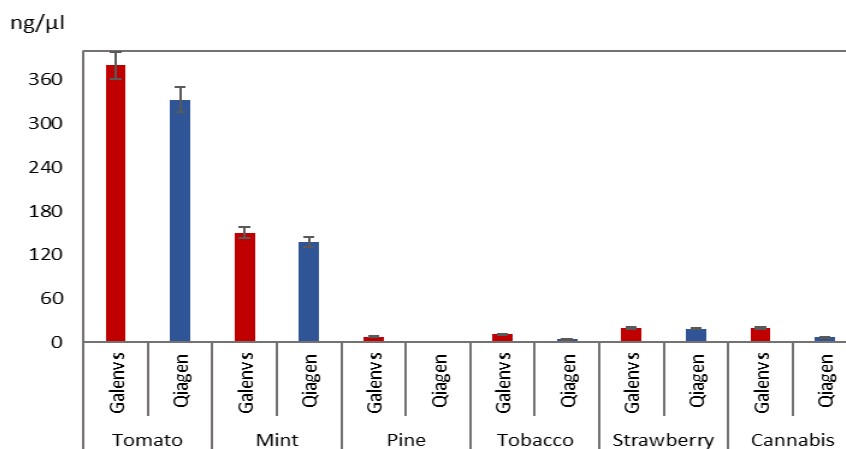
Galenvs *magnetiQ Plant RNA Extraction Kit's* performance was evaluated yield and quality assessment of the extracted RNA from a variety of plant leave samples, compared to the widely used, industry-leading kit:

- Qiagen RNeasy Plant Pro Kit (Qiagen)

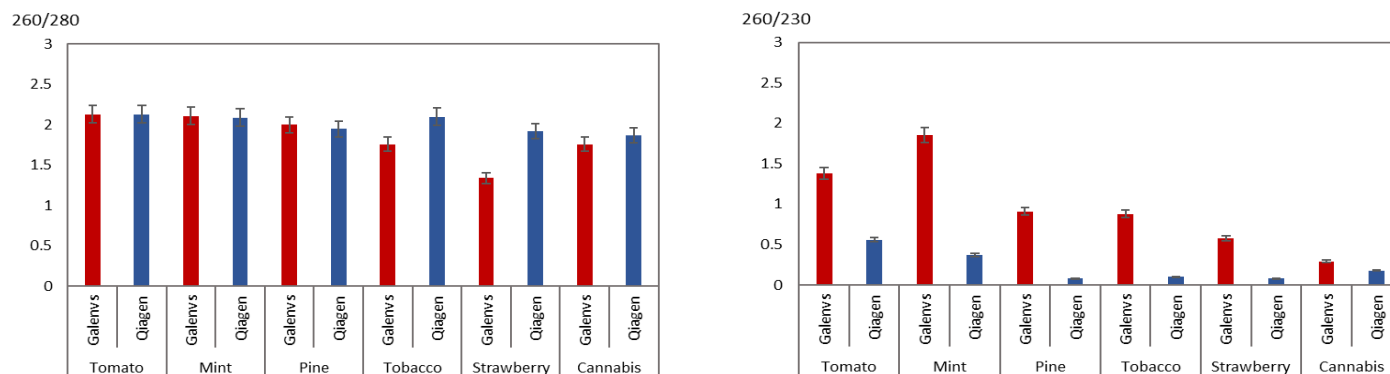
50 mg of plant leaves were prepared according to prepared as per manufacturer instructions and following the *magnetiQ Plant RNA Kit* protocol.



## Yield

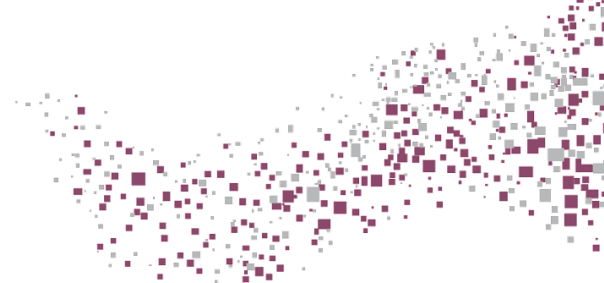


**Figure1:** Extract more high-quality genomic RNA



**Figure2:** RNA purity from different plant leaves

50 mg of different plant leaves were prepared using commercially available sample preparation solutions and compared to the new magnetiQ Plant RNA Kit. The magnetiQ Plant RNA Kit outperformed other available kits, resulting in greater recovery of RNA across a variety of Plant leaves, with high purity.



### Specifications

|                       |   |
|-----------------------|---|
| Main sample type      | Plant samples   |
| Quantity              | 50 assays/ ready-to-use prefilled plates (16 prep)  |
| Elution Volume        | 100µl   |
| RNA 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, (v) elution buffer, (vi) DNase treatment, (vii) Binding buffer, (viii) Wash buffer (2x), and (ix) Elution. (v) elution buffer. |
| Storage               | Room Temperature  |

### Product codes

|                          |        |
|--------------------------|--------|
| 50 preps                 | PR0050 |
| Prefilled plates 16-well | PR0016 |

