

## Where Precision Blooms, RNA Extraction Flourishes

### Introduction

Accurate extraction obtained with minimal time and effort are of great importance to researchers. Total RNA extraction from a variety of plant species and tissue types can be accomplished in just 25 minutes using Ribospin™ Plant. This is achieved while maintaining high purity and yield through the use of optimized buffers, the Ezpure™ Filter, and on-column DNase I treatment, all of which are provided by Ribospin™ Plant.

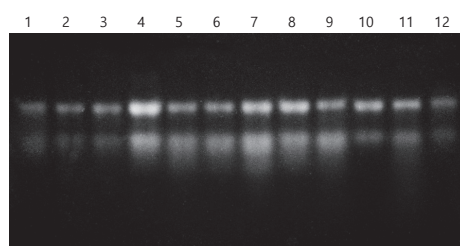
### Highlights

- **Efficient:** silica-based membrane technology ensures reliable RNA extraction
- **Safe, Simple, Fast:** no need for costly resins, toxic phenol-chloroform, or alcohol precipitation
- **Versatile:** compatible with various plant samples, including leaves, roots, sprouts, and other plant parts
- **High purity and integrity:** suitable for sensitive downstream applications such as RT-PCR, qPCR, RNA-sequencing

### Comparison Table

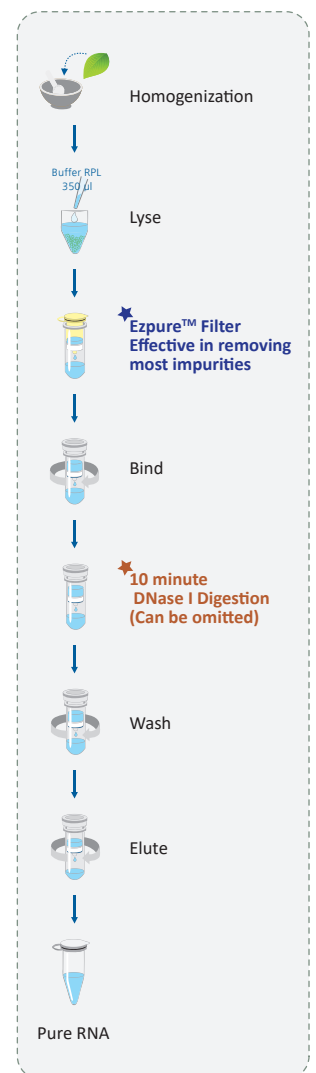
Brand	GeneAll	Company A
Format	Silica Membrane Spin Column	
Applicable Sample Size	Plant samples	
Total Run Time	25 minutes (including DNase I treatment)	30 minutes
DNase I	<b>Included</b>	X

### RNA Extraction from Various Plant Species

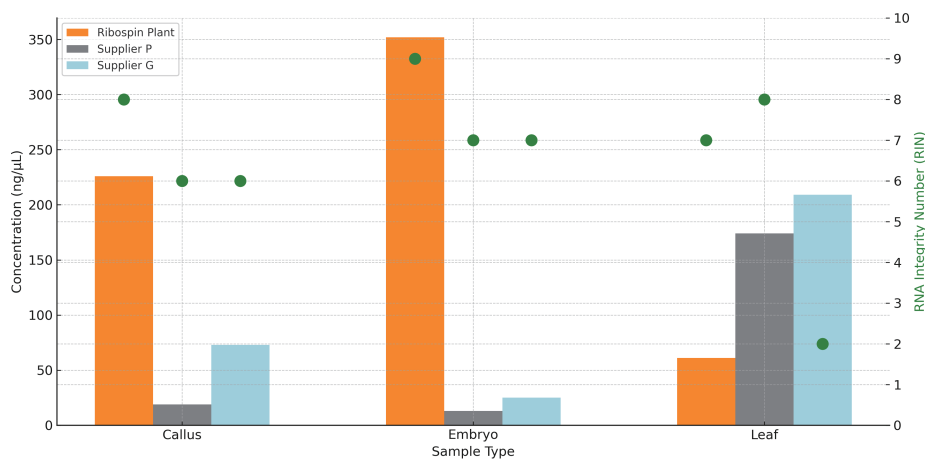


Total RNA was extracted from a wide variety of plant species using Ribospin™ Plant. The extracted RNA was loaded on a 1% formaldehyde gel.

- |  |   |
|--|---|
| Lane 1: Leaf RNA from <i>Pinus densiflora</i>        | Lane 7: Leaf RNA from <i>Nicotiana tabacum</i>      |
| Lane 2: Leaf RNA from <i>Crassula ovata</i>          | Lane 8: Leaf RNA from <i>Lactuca sativa</i>         |
| Lane 3: Leaf RNA from <i>Citrus grandis</i> Osbek    | Lane 9: Leaf RNA from <i>Cucumis sativus</i> L      |
| Lane 4: Leaf RNA from <i>Diospyros kaki</i>          | Lane 10: Root RNA from <i>Plantago asiatica</i>     |
| Lane 5: Leaf RNA from <i>Zea mays</i>                | Lane 11: Root RNA from <i>Nicotiana tabacum</i>     |
| Lane 6: Leaf RNA from <i>Lycopersicon esculentum</i> | Lane 12: Fruit RNA from <i>Citrus grandis</i> Osbek |



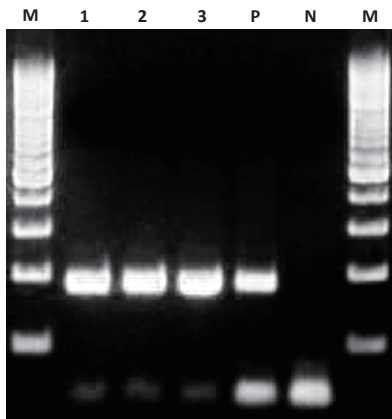
## Comparison of RNA Concentration and Integrity



RNA extracted from plant tissues using Ribospin™ Plant demonstrated excellent quality. Ribospin™ Plant achieved the high concentration and integrity, with RIN values reaching up to 9 (Embryo). This highlights Ribospin™ Plant as a reliable choice for extracting RNA of superior quality, suitable for downstream applications requiring high-purity and intact RNA.

*The results cited are derived from the study "Comparison of Three RNA Extraction Kits for Transcriptome Analysis of Oil Palm (Elaeis guineensis Jacq.)" published in Jurnal Bioteknologi & Biosains Indonesia, Volume 6, Number 1, June 2019 by Siti Zulaeha et al.*

## RNA Extraction Efficiency from Blueberry Leaves



RNA extracted from blueberry leaves using 25 mg of tissue demonstrated high purity and integrity, as evidenced by successful amplification of the Nad5 gene in RT-PCR. Ribospin™ Plant SV kit provided clear and specific bands, confirming the RNA was intact and of sufficient quality for downstream applications.

## Ordering Information

Cat. No.	Product	Size	Preps
117-101	Ribospin™ Plant SV	mini	100
117-152		mini	250
117-201		Midi	100
117-226		Midi	26
117-310		MAXI	10
117-326		MAXI	26