Plant/Fungi Total RNA Purification Kit

CAT. 25800, 28850, 31350, 31900,

FOR THE RAPID PURIFICATION OF TOTAL RNA (INCLUDING MICRORNA) FROM PLANTS AND FUNGI

- Extract total RNA, including virus & viroid RNA
- Robust lysis buffer is well-suited to even challenging samples such as pine needle, grape leaf, etc
- Isolate total RNA (including microRNA) without phenol
- Isolated RNA is of high quality, integrity and diversity
- Also available in 96-well format for high throughput applications
- Purification is based on spin column chromatography that uses Norgen's proprietary resin separation matrix

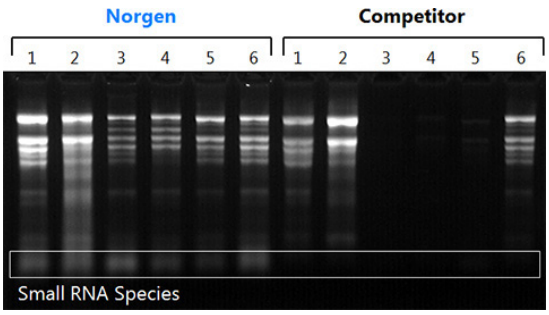
COLLECTION & PRESERVATION
EXTRACTION
APPLICATION

NORGEN BIOTEK

ISO 9001:2015 CERTIFIED QUALITY · ISO 13485:2016 CERTIFIED QUALITY · GMP COMPLIANT

norgenbiotek.com

Advantages You Will Bring to Your Lab

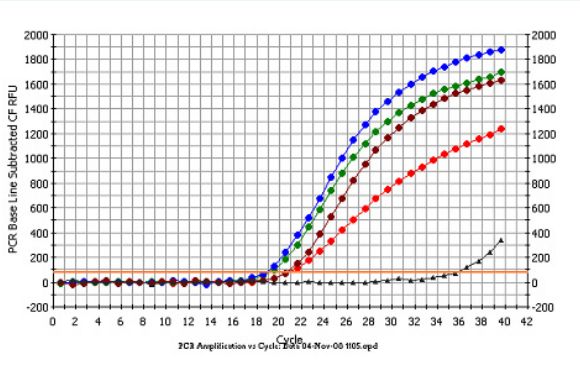


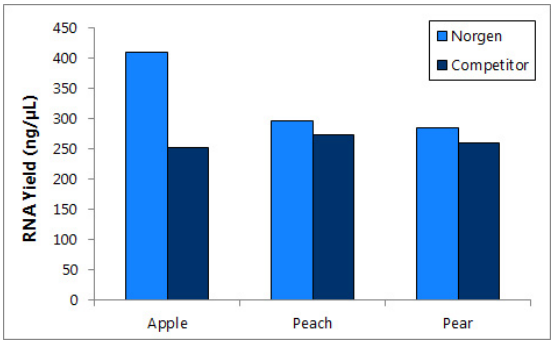
HIGHER YIELDS OF DNA THAN THE LEADING COMPETITOR

Figure 1. Isolation of High Quality RNA, even from Difficult Samples. Total RNA was isolated from 50 mg samples of apple (Lanes 1), peach (Lanes 2), grape (Lanes 3), pine needle (Lanes 4), strawberry (Lanes 5) and pear (Lanes 6) using Norgen's kit and a competitors kit. Five microlitres of total RNA from the 50 µL elution was loaded on 1X MOPS 1.0 % Formaldehyde-Agarose RNA gel for analysis. Norgen's kit allowed for the isolation of high quality RNA from all the samples, including the difficult samples, while the competitor failed to isolate RNA from grape, pine needles and strawberry. Furthermore, only Norgen's kit was able to isolate the small RNA species (white box).

HIGH DNA CONCENTRATION AND QUALITY

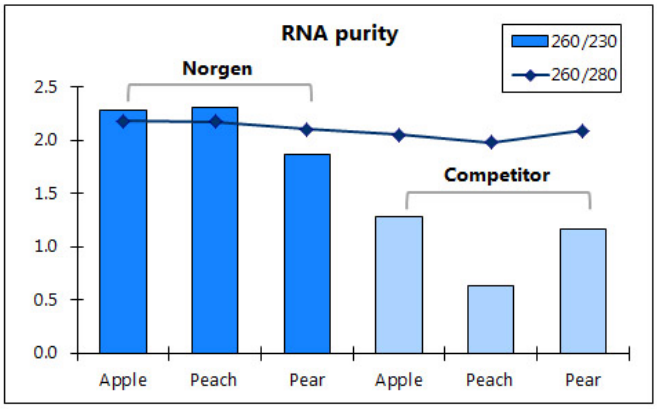
Figure 2. Detection of EF1-α using one step RT-qPCR from Challenging Plant Samples. Total RNA was isolated from 50 mg samples of apple (red), peach (green), pine needle (blue) and grape leaves (burgundy) using Norgen's Plant/Fungi Total RNA Purification Kit. Three µL of the eluted 50 µL of RNA was used in an RT-qPCR reaction for the detection of EF1-α. EF1-α was detected from all samples, indicating that the RNA is of high quality and that the Plant/Fungi RNA Purification kit is highly sensitive for total RNA isolation





BETTER 16S rRNA DETECTION FROM DNA ISOLATED USING NORGEN'S STOOL DNA PRESERVATIVE AND STOOL DNA ISOLATION KIT

Figure 3. High Yield of Plant RNA Samples isolated from Apple, Peach and Pear. Total RNA was isolated using Norgen's kit (Blue bars) and a competitor's kit (Dark blue bars) from 50 mg of apple, peach and pear according to the provided manual. In each case the RNA was eluted into 50 µL. RNA yield was measured by spectrophotometer in triplicate, and the average concentration was used for data analysis. Norgen's kit resulted in higher yields of total RNA, including miRNA. Total processing time was less with Norgen's kit than competitor's kit.



HIGHER YIELDS OF DNA THAN THE LEADING COMPETITOR

Figure 4. High Purity of RNA Samples Isolated from Apple, Peach and Pear. RNA was isolated from 50 mg samples of apple, peach and pear using Norgen's Plant/Fungi RNA Purification Kit and a competitor's kit. RNA purity was determined spectrophotometrically for the RNA isolated using Norgen's kit (260/230 = dark blue bars) and the competitor's kit (260/230 = light blue bars). Also shown is the 260/280 ratio for the samples. Norgen's kit consistently isolated pure samples of Plant RNA with 260/230 ratios above 2.0, whereas the competitor's kit had 260/230 ratios below 1.2 for the same samples.

Kit Specifications

Description	Specifications
Maximum Column Binding Capacity	50 µg
Maximum Column Loading Volume	650 µL
Size of RNA Purified	All sizes, including small RNA (< 200 nt)
Maximum Amount of Starting Material: Plant Tissues Plant Cells Fungi	 50 mg 1 x 106 cells 50 mg (wet weight)
Average Yield* 50 mg Tomato Leaves 50 mg Tobacco Leaves 50 mg Plum Leaves 50 mg Grape Leaves 50 mg Peach Leaves	 60 µg 60 µg 32 µg 35 µg 30 µg
Time to Complete 10 Purifications	30 minutes

*Yield will vary depending on the type of sample processed

Select Publications

Courty, Pierre-Emmanuel, et al. **"The C24-Methyl/Ethyl Sterol Ratio Is Increased by Rhizophagus Irregularis Colonization."** Mycorrhiza, vol. 35, no. 2, Mar. 2025, p. 20. Springer Link, https://doi.org/10.1007/s00572-025-01193-9

Maggiolini, Flavia Angela Maria, et al. **"A Comparative Transcriptomic Study Reveals Temporal and Genotype-Specific Defense Responses to Botrytis Cinerea in Grapevine."** Journal of Fungi, vol. 11, no. 2, 2, Feb. 2025, p. 124. www.mdpi.com, https://doi.org/10.3390/jof11020124.

Mathioudakis, Matthaios M., et al. **"Aphid Species in Citrus Orchards in Crete: Key Vectors of Citrus Tristeza Virus and Automated Monitoring Innovations for Alate Aphids."** Viruses, vol. 17, no. 3, 3, Mar. 2025, p. 395. www.mdpi.com, https://doi.org/10.3390/v17030395.

Ordering Information

Description	Preps	Cat. #
Plant/Fungi Total RNA Purification Kit	50 Preps	25800
Plant/Fungi Total RNA Purification Kit	100 Preps	31350
Plant/Fungi Total RNA Purification Kit	250 Preps	25850
Plant/Fungi Total RNA Purification Kit	2 x 96 Well Plates	31900

Related Products

Description	Prep Size	Cat. #
Plant/Fungi DNA Isolation Kits	50 Preps	26200
Total RNA Purification Kits	50 Preps	17200
Norgen Next Generation Sequencing Services	Call 1-866-Norgenb or Visit norgenbiotek.com	

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Three ways to order

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