

FFPE RNA/DNA Purification Plus Kit



Sequential isolation and purification of total RNA and genomic DNA from FFPE tissue samples



- ✓ Clean-up and concentrate total RNA (including miRNA) in minutes
- ✓ Ideal for concentrating RNA purified from exosomes, plasma, serum, urine and other bodily fluids into small elution volumes.
- ✓ Purify all sizes of RNA, from large mRNA down to miRNA
- ✓ Clean-up RNA from contaminants including enzymes, primers, nucleotides and endotoxins
- ✓ Efficient RNA clean-up from enzymatic reactions, including labelling and DNase treatments
- ✓ Purified RNA is suitable for a variety of downstream applications, including Small RNA Sequencing

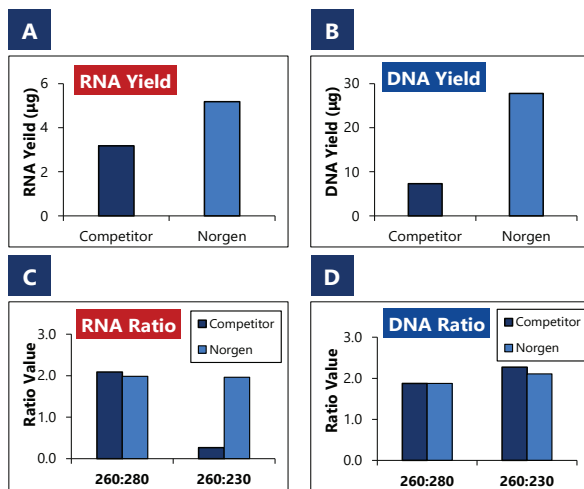


Figure 1. Superior Recovery of High Quality RNA and DNA from FFPE Spleen Tissues. Norgen's FFPE RNA/DNA Purification Plus Kit isolates FFPE RNA and DNA that exceeds the yield of competitors. Total RNA and DNA was isolated from equal amount of hamster FFPE spleen sections (20 micron thickness) using Norgen's FFPE RNA /DNA Purification Plus Kit and a leading competitors kits. Triplicate isolations were performed for each product. The top graphs demonstrate the mean yield of RNA (Panel A) and DNA (Panel B) according to NanoDrop measurement. The bottom graphs showed the mean 260:280 ratio and 260:230 ratio of RNA (Panel C) and DNA (Panel D) according to NanoDrop measurement. Norgen's kit consistently purified total RNA and DNA with a higher yield and higher quality than for those obtained using the market competitor's kits.

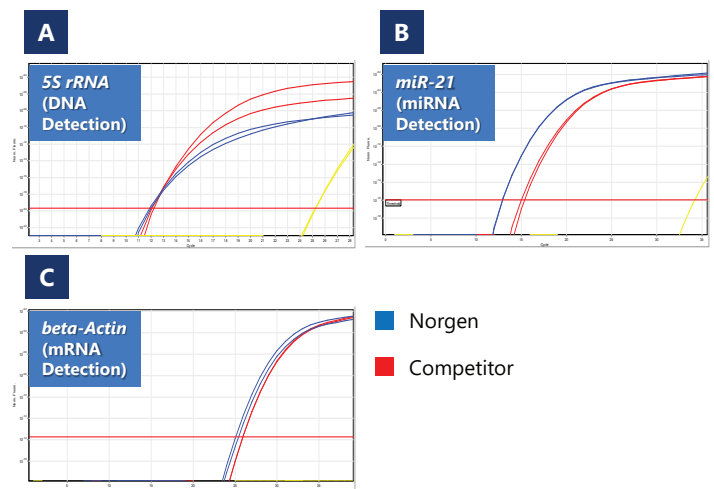


Figure 2. Recovery of High Quality DNA and True Total RNA including microRNA from Hamster Spleen. Genomic DNA isolated using Norgen's FFPE RNA/DNA Purification Plus Kit is of high quality with effective qPCR amplification. Panel A showed that in a qPCR using primers against the 5S rRNA gene using equal amount of FFPE DNA as template, the DNA isolated with Norgen's kit showed better amplification (lower Ct value). Moreover, Norgen's FFPE RNA/DNA Purification Plus Kit isolates true total RNA including microRNA. With the same amount of RNA as template in RT-qPCR reactions for transcripts of miR-21 (Panel B for microRNA) and beta-Actin (Panel C for mRNA), RNA isolated by Norgen showed better amplification in beta-Actin and significantly better in miR-21 microRNA.

Select Publications

Publication Title	Authors	Journal	Year
The use of whole genome methylation scanning to define genes preferentially suppressed in African American Prostate Cancer	Farah Rahmatpanah, Kathleen McGuire, Michael Lilly, Michael McClelland and Dan Mercola	Cancer Epidemiology, Biomarkers and Prevention	2017
MicroRNA-34c-5p is related to recurrence in laryngeal squamous cell carcinoma	Massimo Re, Artan Çeka, Corrado Rubini, Luigi Ferrante, Antonio Zizzi, Federico M. Gioacchini, Michele Tulli, Liana Spazzafumo, Stefano Sellari-Franceschini, Antonio	The Laryngoscope	2015

Kit Specifications (Cat #54300)

Description	Specification
Binding Capacity of RNA Per Column	Up to 35 µg
Binding Capacity of DNA Per Column	Up to 10 µg
Maximum Loading Volume Per Spin Column	600 µL
Size of RNA Purified	All sizes, including small RNA (< 200 nt)
Maximum Amount of Starting Material	4 sections <20 µM thick 10 mg of unsectioned block



About this kit

Norgen's FFPE RNA/DNA Purification Plus Kit provides a rapid method for the sequential isolation and purification of total RNA (including microRNA) and genomic DNA from formalin-fixed paraffin-embedded (FFPE) tissue samples. The RNA and DNA are sequentially purified into separate fractions using this kit. Using formalin to fix tissues leads to crosslinking of the nucleic acids and proteins, and the process of embedding the tissue samples can also lead to fragmentation of the nucleic acids over time. Norgen's FFPE RNA/DNA Purification Plus Kit provides conditions that allow for the partial reversing of the formalin modifications, resulting in a high quality and yield of nucleic acids. The kit is able to purify all sizes of RNA, from large mRNA and ribosomal RNA down to microRNA (miRNA) and small interfering RNA (siRNA), depending on the age of the FFPE tissue as the degree of fragmentation of the RNA will increase over time. The RNA is purified from other cellular components without the use of phenol or chloroform. The purified RNA is of the highest integrity, and can be used in a number of downstream applications including real time PCR, reverse transcription PCR, Northern blotting, RNase protection and primer extension, and expression array assays. The purified genomic DNA is also of the highest quality, and can be used in PCR reactions, sequencing, Southern blotting and SNP analysis.

v3.0

Ordering information

Description	Size	Cat. Number
FFPE RNA/DNA Purification Plus Kit	50 preps	54300
FFPE RNA Purification Kit	50 preps	25300
FFPE DNA Purification Kit	50 preps	47400
FFPE RNA Purification 96-Well Kit	2 x 96-well plates	25400

