

## Plasma/Serum Circulating and Exosomal RNA Purification 96-Well Kit (Slurry Format)

Norgen's Plasma/Serum Circulating and Exosomal RNA Purification 96-Well Kit (Slurry Format) provides a fast, reliable and simple procedure for isolating circulating and exosomal RNA from plasma and serum samples ranging from 0.25 mL to 2 mL. Free-circulating RNA and exosomal RNA in plasma and serum can serve as both tumor- and fetal-specific markers for cancer detection and prenatal diagnosis. As well, free-circulating and exosomal RNAs have the potential to provide biomarkers for other disease states. Free-circulating RNA in plasma or serum are usually present as short fragments of less than 1000nt, and free-circulating miRNA (21nt) can also be found in plasma and serum. This kit is able to isolate all sizes of circulating and exosomal RNA, including microRNA, without the use of phenol or chloroform. Nor-



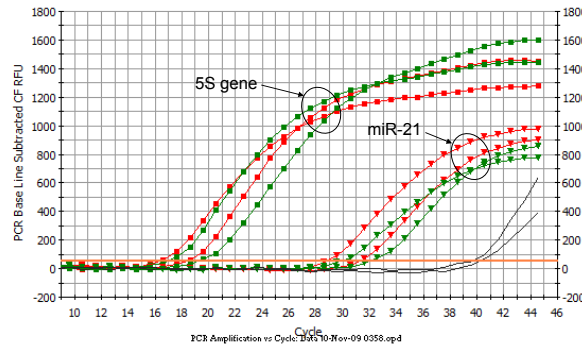
gen's Plasma/Serum Circulating and Exosomal RNA Purification 96-Well Kit (Slurry Format) provides an efficient method for the purification of free-circulating and exosomal RNA from human plasma or serum. Purification is based on the use of Norgen's proprietary resin as the separation matrix. The slurry format provides an advantage over other available kits in that it does not require extension tubes for the purification of free-circulating RNA from large sample volumes.

Kit Specifications			
Minimum Plasma/Serum Input	0.25 mL	Time to Complete 96 Purifications	< 1 hour
Maximum Plasma/Serum Input	2 mL	Size of RNA Purified	All sizes, including microRNA

### Plasma/Serum Circulating and Exosomal RNA Purification 96-Well Kit Benefits

Isolate all sizes of circulating and exosomal RNA	The kit allows for the isolation of all sizes of fragmented circulating RNA and exosomal RNA, including microRNA.
Fast and easy processing	Rapid slurry-based format allows for the processing of 96 samples in less than 1 hour.
Concentrate circulating and exosomal RNA	Circulating RNA and exosomal RNA present in input volumes of 0.25 - 2 mL are concentrated into final elution volumes of 100 $\mu$ L.
Isolate inhibitor-free RNA	Purified RNA can be used in a number of sensitive downstream applications including real time PCR, reverse transcription PCR, Northern blotting, RNase protection and primer extension, and expression array assays.

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**Figure 1. Isolation and Detection of Circulating RNA from 1 mL Samples of Serum and Plasma**

Norgen's Plasma/Serum Circulating RNA Purification 96-Well Kit was used to isolate circulating RNA from 1 mL samples of serum and plasma. Five microlitres of the purified RNA was then used as the template in RT-qPCR reactions to detect the human 5S gene and the miR-21 gene. Both the 5S housekeeping gene and the miR-21 gene could be detected from plasma (red) and serum (green), indicating the high quality of the purified RNA. The black line corresponds to the no template control.

### Plasma/Serum Circulating and Exosomal RNA Purification 96-Well Kit Contents:

1. Slurry C3
2. Lysis Buffer A
3. Wash Solution A
4. Elution Solution A
5. 96-Well Filter Plate
6. Adhesive Tape
7. 96-Well Collection Plate
8. 96-Well Elution Plate
9. Product Insert

### Customer-Supplied Reagents and Equipment

- Vacuum manifold or centrifuge with rotor for 96-well plate assembly
- Centrifuge with a swinging bucket rotor capable of 2000 RPM
- Benchtop microcentrifuge
- Micropipettors
- 96 – 100% ethanol
- $\beta$  - Mercaptoethanol
- 15 mL tubes

### Storage Conditions

All buffers should be kept tightly sealed and stored at room temperature (15-25°C) for up to 1 year without showing any reduction in performance.

### Shipping Conditions

The Plasma/Serum Circulating and Exosomal RNA Purification 96-Well Kit is shipped at room temperature.

Cat #	Description	Quantity
29500	Plasma / Serum Circulating and Exosomal RNA Purification 96-Well Kit (Slurry Format)	96 preps (1 plate)