

Exosomal RNA Isolation Kit

This kit provides a fast, reliable and convenient method to isolate and concentrate exosomal RNA from exosomes previously purified using Norgen's Urine Exosome Purification Kits or Norgen's Plasma/Serum Exosome Purification Kits. This kit also allows for the isolation of RNA from intact extracellular vesicles (EVs) purified from different urine or plasma/serum sample volumes. The purification is based on Norgen's proprietary resin.

The Exosomal RNA Isolation Kit is designed to isolate all sizes of extracellular vesicle RNA, including microRNA. The kit provides a clear advantage over other available kits in that it does not require any special instrumentation, protein precipitation reagents, extension tubes, phenol/chloroform or protease treatments. Moreover, the kit allows the user to elute into a flexible elution volume ranging from 50 μ L to 100 μ L. 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.



Kit Specifications

Size of RNA Purified	All sizes, including miRNA and small RNA (< 200 nt)	Sample type	Plasma/Serum or Urine Exosomes purified using Norgen's Urine Exosome Purification Kits or Plasma/Serum Exosome Purification Kits
Elution Volume	50-100 μ L		
Average Yields	Variable depending on specimen	Time to Complete 10 Purifications	35 - 40 minutes

Features and Benefits

Diverse	Isolate all sizes of exosomal and extracellular vesicle RNA, including microRNA
Phenol-Free	No phenol extractions nor carrier RNA
Flexible	Concentrate isolated RNA into a flexible elution volume ranging from 50 μ L to 100 μ L
Fast and Accurate	Purify high-quality RNA/DNA in 15 - 20 minutes

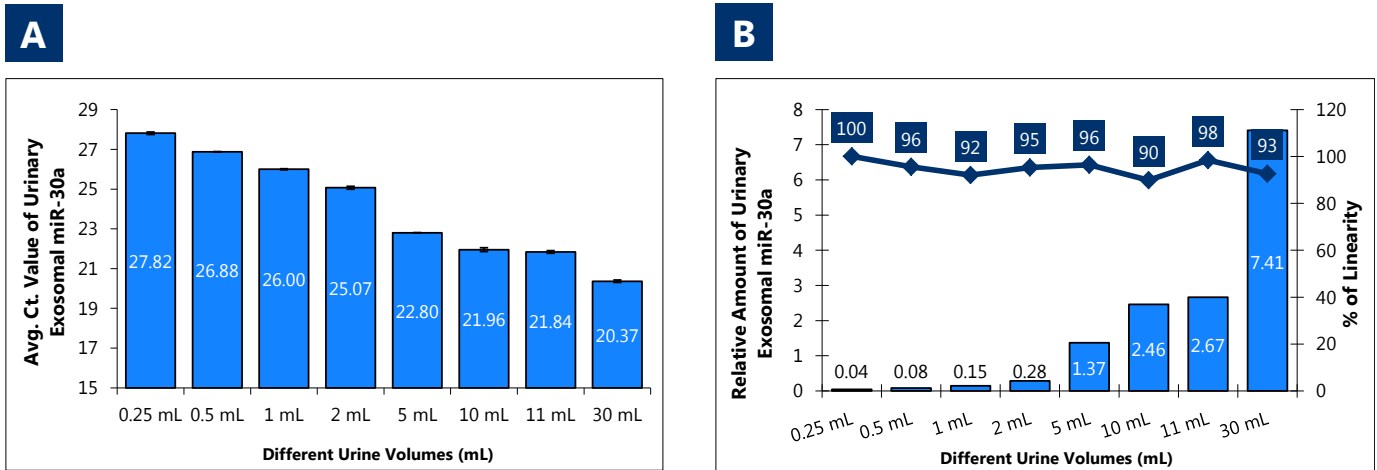


Figure 1. Isolation of RNA from exosomes purified from different urine volumes. Norgen's Exosomal RNA Isolation Kit (Cat# 58800) was used to isolate RNA from exosomes isolated from different urine volumes purified using Norgen's Urine Exosome Purification Kits (Cat# 57700, 57800 and 57900). Two microlitres of the isolated RNA was then used as the template in RT-qPCR reactions to assess the amplification of the isolated urinary exosomal miR-30a. (A) The urinary exosomal miR-30a is linearly decreasing with increasing the sample input volume. (B) The relative amount of the urinary exosomal miR-30a shows excellent linearity with a percentage of recovery of more than 90%.

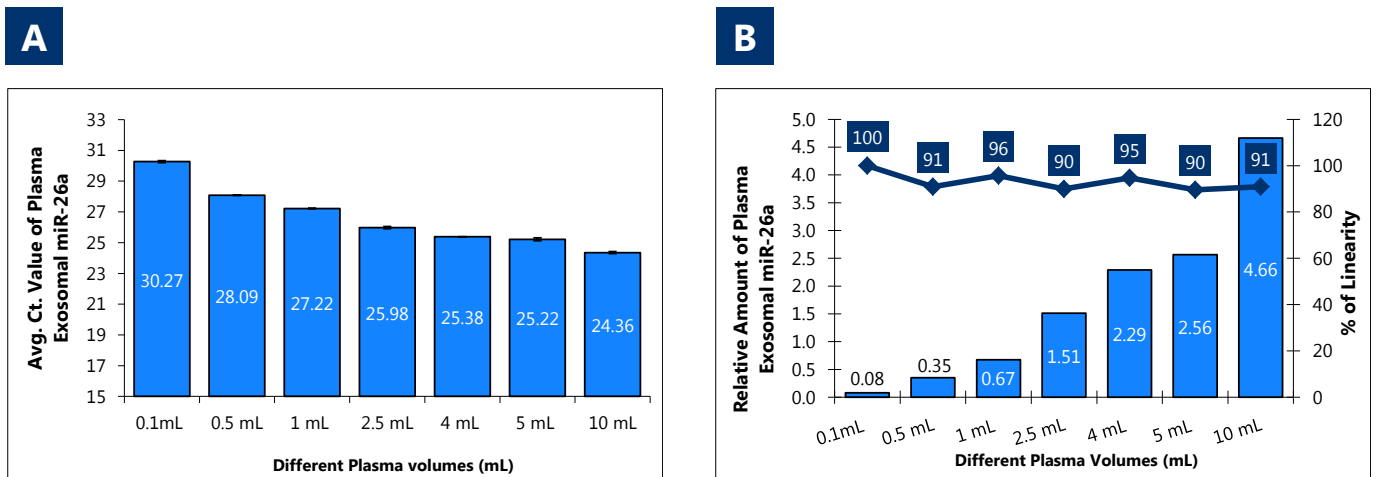


Figure 2. Isolation of RNA from exosomes purified from different plasma volumes. Norgen's Exosomal RNA Isolation Kit (Cat# 58800) was used to isolate RNA from exosomes isolated from different plasma volumes purified using Norgen's Plasma/Serum Exosome Purification Kits (Cat# 57400, 57500 and 57600). Two microlitres of the isolated RNA was then used as the template in RT-qPCR reactions to assess the amplification of the isolated plasma exosomal miR-26a. (A) The plasma exosomal miR-26a is linearly decreasing with increasing the sample input volume. (B) The relative amount of the plasma exosomal miR-26a shows excellent linearity with a percentage of recovery of more than 90%.

Kit Components	Cat. 58000
Lysis Buffer A	20 mL
Lysis Additive B	2 mL
Wash Solution A	18 mL
Elution Solution A	6 mL
Mini Spin Columns	50
Collection Tubes	50
Elution Tubes (1.7 mL)	50
Product Insert	1

Customer-Supplied Reagents and Equipment

- Disposable powder-free gloves
- Benchtop microcentrifuge
- Micropipettors
- Sterile pipette tips with filters
- Vortex
- 96-100% Ethanol

Storage Conditions

All buffers should be kept tightly sealed and stored at room temperature (15-25°C) for up to 2 years without showing any reduction in performance. It is recommended to warm Lysis Buffer A for 20 minutes at 60°C if any salt precipitation is observed.

Cat #	Description	Size
58000	Exosomal RNA Isolation Kit	50 preps