

Exosome Precipitation Solution

(Serum / Plasma)

1. Contents

Exosome Precipitation Solution (Serum / Plasma)			
REF	740398.2	740398.12	740398.60
Exosome Precipitation Solution (Serum / Plasma)	2 mL	12 mL	60 mL
RNase-free H ₂ O	13 mL	30 mL	60 mL

2. Product description

Exosomes are small vesicles (30–150 nm) secreted by various cell types and are found in many body fluids, such as blood, cerebrospinal fluid, urine, saliva, and breast milk. Their RNA and protein content can be a valuable source of biomarkers. By precipitating the exosomes from large sample volumes, those biomarkers can be enriched and the background of free circulating nucleic acids is significantly reduced.

3. Storage conditions

Exosome Precipitation Solution (Serum/Plasma) can be stored at room temperature (15–25 °C) until: see package label.

4. Safety instructions

The Exosome Precipitation Solution (Serum / Plasma) does not contain hazardous contents.

5. Protocol

Check precipitation solution

If Exosome Precipitation Solution (Serum/Plasma) shows white precipitate, heat to 45 °C and mix well until all precipitate is redissolved. Let the solution cool down to room temperature before use.

Remove intact cells

Centrifuge serum / plasma for **15 min** at **> 10,000 x g**.

Intact cells and cellular debris are pelleted. Exosomes remain in the supernatant.

Transfer **up to 1 mL** of the supernatant to a new microcentrifuge tube. Avoid disturbing the pellet.

0.1 – 0.5 mL of serum / plasma typically contains enough exosomes for standard analysis.

Precipitate exosomes

Add **0.4 volumes of Exosome Precipitation Solution (Serum/ Plasma)**.

E. g., add 200 µL Exosome Precipitation Solution (Serum / Plasma) to 500 µL supernatant.

Vortex for **10 s** to mix sample thoroughly.

Incubate for **30 min** at **2–8 °C**.

Separate exosomes

Centrifuge for **5 min** at **> 500 x g**.

Discard supernatant carefully and completely.

Isolation of total RNA:

Resuspend exosomes in **300 µL RNase-free H₂O** and use the **NucleoSpin® miRNA Plasma** kit (REF 740981) to purify miRNA and larger RNA.

Exosome pellets from serum / plasma are difficult to resuspend. Vortexing is ineffective, so resuspend the pellet by pipetting up and down several times and use the pipette tip to mechanically assist the resuspension.

6. Product use restriction / warranty

All MACHEREY-NAGEL products are designed for their intended use only. They are not intended to be used for any other purpose. The description of the intended use of the products can be found in the original MACHEREY-NAGEL product leaflets. Before using our products, please observe the instructions for use and the safety instructions from the respective Material Safety Data Sheet of the product.

This MACHEREY-NAGEL product is carrying documentation stating specifications and other technical information. MACHEREY-NAGEL warrants to meet the stated specifications. The provided warranty is limited to the data specifications and descriptions as given in the original MACHEREY-NAGEL literature. No other statements or representations, written or oral, by MACHEREY-NAGEL's employees, agents or representatives, except written statements signed by a duly authorized officer of MACHEREY-NAGEL are authorized. They should not be relied upon by the customer and are not a part of a contract of sale or of this warranty.

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