



# Purified exosomes from A549 cell culture supernatant (DAGA-998)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Antigen Description</b> | Exosomes are small endosome derived lipid nanoparticles (50-120 nm) actively secreted by exocytosis by most living cells. Exosome release occurs either constitutively or upon induction, under both normal and pathological conditions, in a dynamic, regulated and functionally relevant manner. Both amount and molecular composition of released exosomes depend on the state of a parent cell. Exosomes have been isolated from diverse cell lines (hematopoietic cells, tumor lines, primary cultures, virus infected cells) as well as from biological fluids in particular blood (e.g. serum and plasma from cancer patients) and other body fluids (bronchoalveolar lavage fluid, pleural effusions, synovial fluid, urine, amniotic fluid, semen, saliva etc). Exosomes have pleiotropic physiological and pathological functions and an emerging role in diverse pathological conditions such as cancer, infectious and neurodegenerative diseases. |
| <b>Conjugate</b>           | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>        | <p>Assay calibration.</p> <p>Control (spike-in) for exosome quantification.</p> <p>Protein marker analysis using different techniques.</p> <p>Extraction and analysis of exosome nucleic acid.</p> <p>Standardized positive controls for immunocapture performance evaluation.</p> <p>Flow cytometry.</p> <p>Electron microscopy.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Reconstitution</b>      | <p>Reconstitute lyophilized exosome standard by adding deionized water, 100 µl for Lyophilized Standard 100 µg, to get a final concentration of 1 µg/µL. Different volumes of deionized water for exosomes reconstitution can be chosen by the users in according with the desired final concentration. Resuspend exosomes pipetting the solution up and down 10-15 times, avoiding bubbles. Vortex the reconstituted standard for 60 seconds.</p> <p>Briefly centrifuge the tubes containing the standard to ensure that the solution is collected at the</p>                                                                                                                                                                                                                                                                                                                                                                                                 |

bottom of the tube. Pipette the solution up and down 10 times, avoiding the introduction of bubbles. After this step, the standard is ready to use.

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| <b>Format</b>        | Lyophilized                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Concentration</b> | Batch dependent - please inquire should you have specific requirements.                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Size</b>          | 100 µg × 2                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Preservative</b>  | None                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>       | Lyophilized exosomes can be stored for 36 months at 4°C.<br>Reconstituted exosome standards are not suitable for long term conservation at room temperature, use them within 2 hours after reconstitution. The remaining reconstituted standard stock solution should be aliquoted into polypropylene vials (preferably low binding) and stored at -20°C for up to one month or at -80°C for up to six months. Strictly avoid repeated freeze-and-thaw cycles. |

## BACKGROUND

**Keywords** exosome; extracellular vesicles; purified exosome; lyophilized exosome; exosome standards