Exo-Flow[™] Selective Exosome Capture

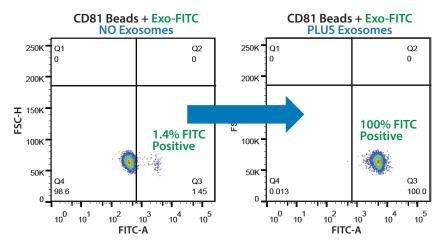
Immunopurify subpopulations of exosomes efficiently

Exosomes are 60 - 180 nm membrane vesicles secreted by most cell types in vivo and in vitro and contain distinct subsets of RNAs and proteins depending upon the cell type from which they are secreted, making them useful for biomarker discovery and functional characterization. Exosomes can originate from any tissue or cell type and end up in a mixed population biofluid. Since exosomes are too small for direct FACS analysis, they must first be captured on a larger surface. The new Exo-Flow magnetic antibody bead kits are designed to enable selective capture of exosomes to purify on magnetic plates and can be used for flow sorting distinct subpopulations of exosomes based on a particular surface marker-"Flow Exometry".

The Exo-Flow™ kits are designed to enable the selective capture to immunopurify and for flow sorting to separate distinct subpopulations of exosomes, based on a particular surface marker. You will first enrich for all exosomes using ExoQuick (serum, plasma, ascites samples) or ExoQuick-TC (cell media, urine, spinal fluid). The isolated exosomes are then resuspended and bound to the magnetic beads for specific capture and subsequent FACS analysis and sorting. The Exo-Flow kits are modular, thus you can select from various pre-validated capture antibody kits, or utilize your own biotinylated capture antibody corresponding to the exosome surface marker specific for the exosomes of interest in your model system.

The 9.1 um diameter of the Exo-Flow beads enables more exosome capture per volume added when compared to 4 um Dynabeads. This is significant in that some exosome subpopulations that are desired may only be present in very low numbers. The increased surface area enables the more efficient capture of these rare exosomes. *Bigger is better*. SBI has also invented a unique, universal exosome stain, Exo-FITC™ for flow sorting.

Quantitative capture of CD81 exosomes with Exo-Flow



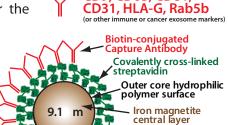
Exosome Research



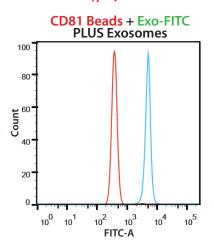
Highlights

- Large surface area magnetic beads for enhanced capture capability
- Selectively purify exosome subpopulations based on surface markers
- Use Tetraspanins, Adhesion molecules, or Fusion markers for capture
- Modular system use your own specific biotinylated antibody to purify exosomes
- Universal and reversible Exo-FITC stain to "paint" captured exosomes for FACS

CD9, CD63, CD81

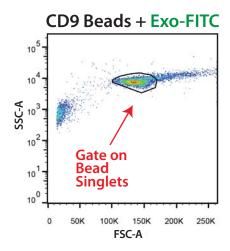


Exo-Flow Beads



www.systembio.com/exo-flow

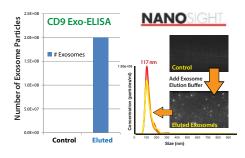
Sample gate setting for Exo-Flow beads

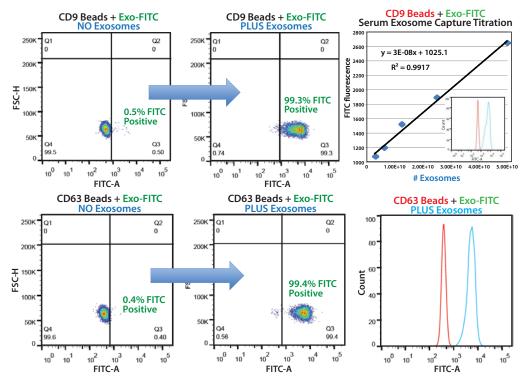


Complete Exo-Flow kits

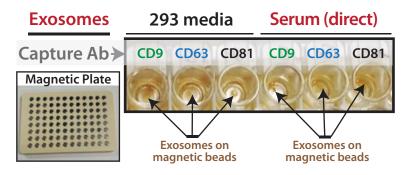
Item	Amount
Exo-Flow Streptavidin Magnetic	400 μL at
Beads, 9.1 µm	10 mg/mL
Biotinylated capture antibody, 100 ng/µL in PBS (multiple varieties)	100 μL
Bead Wash buffer	60 mL
Exosome Stain Buffer	3 mL
Exo-FITC Universal exosome stain	100 μL
Exosome Stain/Elution Buffer	3 mL
Magnetic stand (optional, cat# EXOFLOW700A-1)	1 Stand

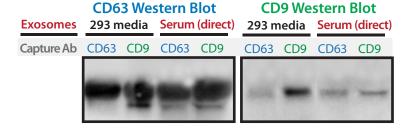
Obtain highly-purified and intact exosomes





Immunopurify exosome directly on beads





We Also Offer Custom Services

System Biosciences offers a wide-range of custom services to support your research, allowing you to spend less time making tools, and more time making discoveries. To learn more, visit our website at www.systembio.com/service or call us at 888-266-5066.

