

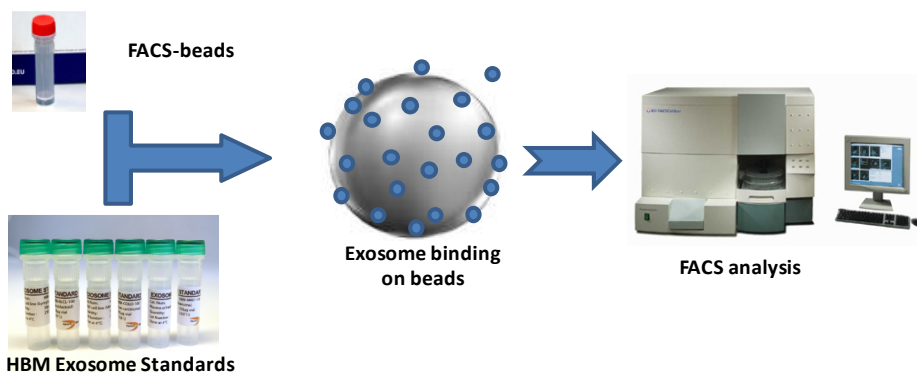
Ready to Use Kit for exosomal marker identification

Kit for Fluorescence-Activated Cell Sorting (FACS) analysis of exosomal markers

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.

Exo-FACS Ready to Use Kit: exosomal marker identification by FACS analysis

HBM provides a ready to use kit for a qualitative FACS analysis of exosomes. Exo-FACS assay for exosomes characterization consists of 4µm beads used for the direct overall capture of exosomes pre-purified, validated and lyophilized for long term storage from cell culture supernatants or human biological fluids. The characterization of exosomal proteins (membrane expressed or internal) is subsequently performed by using appropriate detection antibodies against exosomes associated antigens. Exo-FACS could be custom made with HBM available antibodies.



Use Exo-FACS Kits for...

- Exosome capture and characterization of exosomal markers by FACS analysis
- Exosome comprehensive profiling
- Possibility to choose between exosomes purified and lyophilized from human biofluids (plasma, serum, urine, saliva) and from different cell supernatants

Advantages

- No initial exosome purification required
- User friendly and reliable and efficient
- Suitable for multiple marker analyses
- Available in custom format

HBM provides different types of Exo-FACS for qualitative analysis of exosomal markers from human body fluids or cell culture supernatants

HBM-Exo-FACS Kits

| Code | Description | Exosome Standards |
|--|---|-------------------|
| Exo-FACS Ready to Use Kits for analysis of exosomal markers from human biofluids | | |
| HBM-FACS-PEP | FACS analysis of exosomes derived from human plasma | PEP100 (100 µg) |
| HBM-FACS-PES | FACS analysis of exosomes derived from human serum | PES100 (100 µg) |
| HBM-FACS-PEU | FACS analysis of exosomes derived from human urine | PEU100 (100 µg) |
| HBM-FACS-PESL | FACS analysis of exosomes derived from human saliva | PESL100 (100 µg) |
| Exos-FACS Ready to Use Kits for analysis of exosomal markers from cell culture supernatants | | |
| HBM-FACS-COLO1 | FACS analysis of exosomes derived from COLO1 cell line | COLO100 (100 µg) |
| HBM-FACS-MM1 | FACS analysis of exosomes derived from MM1 cell line | MM11(100 µg) |
| HBM-FACS-BLCL | FACS analysis of exosomes derived from BLCL cell line | BLCL (100 µg) |

Exo-FACS contains reagents for 20 reactions (lyophilized exosomes, beads, antibodies and buffers). Primary antibody included in the kit is against a common exosomal marker (CD9 or CD63) and can be used as a positive control in a protein profiling via FACS analysis. Kit can be easily customized by customers indicating personally the Exosome Standards and antibodies to include in the kit.

Exo-FACS is an useful tool for exosome protein profiling by using FACS technique

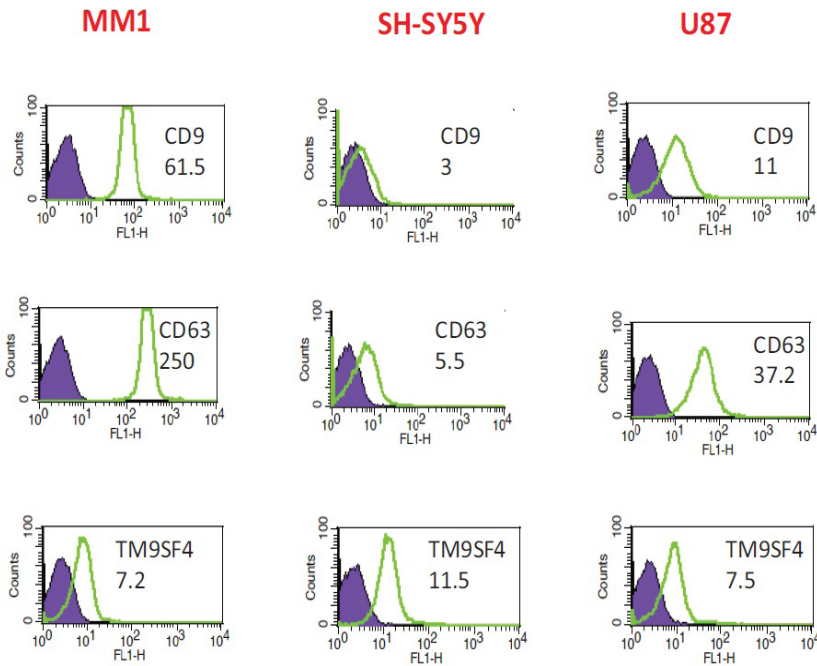


Figure 1. FACS profiling of exosomal markers CD9, CD63 and TM9SF4 in purified exosomes from MM1, SH-SY5Y and U87 cell lines.

Exo-FACS was used for a protein marker profile in exosomes derived from different sources. Exosome binding on FACS beads was performed by incubation at 4°C overnight. Exosome-bead complex is ready to be labeled with fluorophore-conjugated antibodies for specific exosome markers. In figure 1 has been shown a profile of expression of three different exosome markers in exosomes purified from Melanoma (MM1), Neuroblastoma (SH) and Glioblastoma (U87) cell supernatants (*HansaBioMed exosome standards*).

TECHNICAL CHARACTERISTICS (Components for 20 reactions)

| | |
|-----------------------------|---|
| FACS-Beads | 4 µm Aldheyde-Sulfate latex beads (100 µl). |
| Exosome Standards | 1 vial (100 µg) of HBM-Exosome Standards (lyophilized), from human biofluids (plasma, serum, urine, saliva) or from cell culture supernatants |
| Primary Antibody | Primary antibody for exosome marker detection as positive control (40 µl) |
| Secondary Antibody | Secondary antibody Alexa 488, 20 µl |
| Sample Buffer | Buffer for antibody incubation |
| Shipment and storage | All the reagent are shipped and stored at 4°C as recommended in the product insert |
| Expiration date | 12 months |

Custom made Exo-FACS Ready to Use Kit: Personalize your Research Tools

HansaBioMed offers you the possibility to design and create your own kit by choosing among a wide variety of reagents available in our catalog.

- 1-Select the exosome standard you need.
- 2-Select the primary antibody for exosome detection.