

# ExoFACS™ kit for Plasma Exosomes

(Catalog # \*K1232-20; 20 reactions; Store at 4°C) (\*Not available for sale in USA)

## I. Introduction:

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 the 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, and virus infected cells) as well as from biological fluids in particular blood (e.g. serum and plasma from cancer patients) and other body fluids (broncho alveolar 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.

ExoFACS™ allows exosome isolation from biofluids or cell culture media and FACS analysis of exosome markers. The kit consists of components for exosome isolation, 4 µm beads for the overall capture of pre-isolated exosomes and lyophilized exosomes from cell culture supernatants or human biological fluids as the positive control. The characterization of exosomal proteins (membrane expressed or internal) is subsequently performed using appropriate detection antibodies against exosome associated antigens. Biovision offers different ExoFACS™ kits for staining of exosomal markers from human biofluids (plasma, urine, serum, saliva) and from cell culture supernatants. ExoFACS™ 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 for protein profiling via FACS analysis.

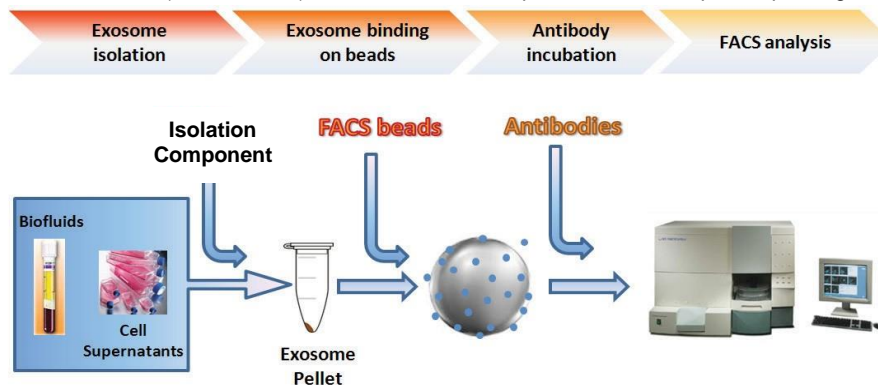


Figure 1. ExoFACS™ Exosome isolation and exosome marker characterization via FACS.

## II. Application:

- ExoFACS™ Kits ensure exosome isolation and exosome marker characterization via FACS.
- Exosome comprehensive profiling.
- No initial exosome purification required.
- Lyophilized Exosome Standards for positive control included.
- User friendly and suitable for multiple marker analyses.

## III. Sample Type:

- Human biological fluids: Plasma.

## IV. Kit Contents (Ready to use kit for FACS analysis from human plasma):

Components	Description	K1232-20	Part Number
Isolation Component	Exosome isolator	1 bottle (3 ml)	K1232-20-1
FACS-beads	4 µm Aldehyde-Sulfate latex beads	1 vial (120 µl)	K1232-20-2
Primary Antibody	Anti-human CD9 mouse antibody	1 vial (20 µl)	K1232-20-3
Secondary Antibody	Secondary antibody Alexa 488	1 vial (3 µl)	K1232-20-4
Sample Buffer (5X)	Buffer for antibody incubation	1 bottle (10 ml)	K1232-20-5
Exosome Standards (100 µg)	Lyophilized exosomes from healthy donors (Plasma)	1 vial (100 µg)	K1232-20-6

## V. User Supplied Reagents and Equipment:

- Single-use and/or pipettes with disposable tips 2-100 µl
- Polypropylene tubes
- Pipettes 1 ml and 5 ml for reagent preparation
- Deionized water
- PBS
- BSA or FBS or FCS
- Disposable pipetting reservoirs
- Prepare the Washing buffer (not provided in the kit)
- FACS tubes



