Fluorescent Exosome Standards

Pioneering the EV Field

About Exosomes

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.

Fluorescent Exosomes Standards

HansaBioMed's fluorescent exosomes are suitable for EV tracking studies, flow cytometry and electron microscopy. Fluorescent exosomes are quantified for overall protein content and particle number and validated by Nanoparticles Tracking Analysis (NTA, NanoSight). One vial contains 100 µg of purified exosomes (measured as total protein content; number of particles in 100 µg: > $1x10^9$). The excitation maximum of fluorescent exosome standards is 500 nm - 650 nm and emission maximum is 510 - 665 nm.

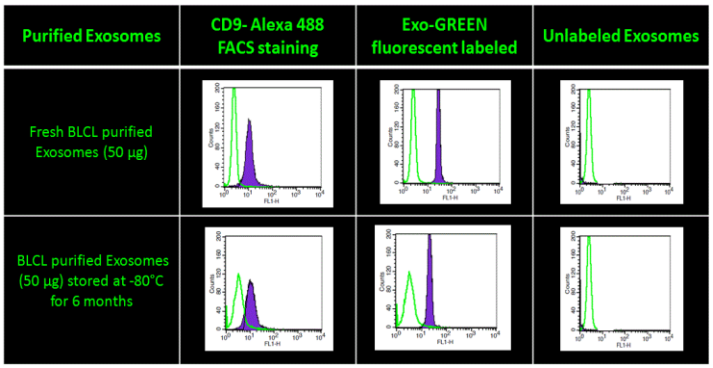
Types of Fluorescent labeled Exosome Standards available

- Fluorescent exosome standards from human Biofluids (plasma, serum, urine, saliva) of healthy donors.
- Fluorescent exosomes from cell culture media (COLO1, BLCL21, HCT116, SK-N-SH, U87, PC3, BPH-1, DAUDI, A549, K562, mouse cell B16F10).
- Fluorescent labeled Exosome Standards size avalable: 100 µg vial of liquid exosome solution .

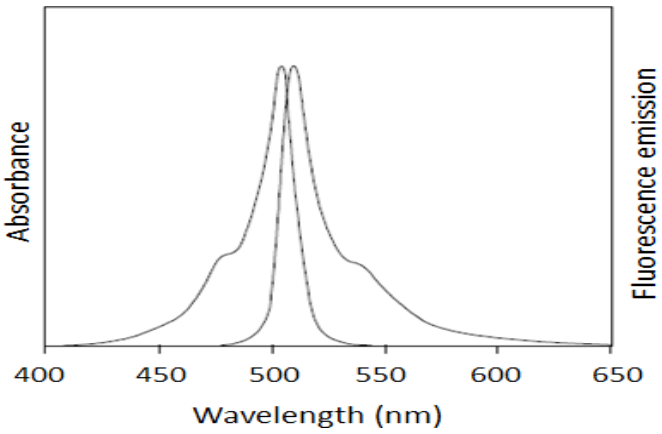
Storage

- Fluorescent labeled Exosomes are shipped in liquid form at controled temperature (4°C) and must be stored at -20°C protected from light.
- Fluorescent labeled exosomes are stable for approximately 6 months storage at -20°C. Avoid repeated freeze-and-thaw cycles. Protect from light.

Performance



1. FACS analysis of purified BLCL exosomes, labeled with CD9-Alexa488, with Exo-GREEN and unlabeled.



2. Absorption and corrected fluorescence emission spectrum of Exo-GREEN. Excitation at 488 nm.