

Cell Navigator™ Flow Cytometric Exosome Staining Kit

Catalog number: 22426 Unit size: 100 Tests

Component	Storage	Amount (Cat No. 22426)
Exosome CD9 Staining Reagent	Refrigerated (2-8 °C), Minimize light exposure	1 Vial (100 Tests)

OVERVIEW

Exosomes, nanoscale (30-150 nm) membrane-bound vesicles secreted by cells, are central to intercellular communication. They transfer proteins, lipids, and nucleic acids, including RNA species, between cells, playing a pivotal role in physiological and pathological processes such as immune modulation, disease progression, and genetic information exchange. This makes exosomes key targets in therapeutic and diagnostic research. However, challenges such as dye aggregation and the absence of bright, specific probes have hindered the reliable detection and analysis of exosomes. The Cell Navigator™ Flow Cytometric Exosome Staining Kit addresses these challenges by enabling the detection of CD9-positive exosomes in purified or bead-bound samples. It utilizes a fluorescent dye-conjugated CD9 marker for targeted visualization, providing a straightforward staining protocol for rapid and accurate exosome detection in diverse sample matrices, including cell culture supernatants, biological fluids, and isolated exosome preparations. To ensure effective detection and analysis, it is essential to enrich the cell culture media for exosomes before staining. This can be achieved through efficient methods such as the ReadiPrep™ Exosome Isolation Kit (Cat No. 60204) or traditional ultracentrifugation.

KEY PARAMETERS

Flow cytometer

Emission 530/30 nm Filter
Excitation 488 nm Laser
Instrument specification(s) FITC Channel

SAMPLE EXPERIMENTAL PROTOCOL

Staining of Exosomes

- Isolate exosomes from cell culture medium using the ReadiPrep™ Exosome Isolation Kit (Cat# 60204) or your method of choice.
- 2. Add 5 uL of Exosome CD9 Staining Reagent into 100 uL of exosome solution.
- 3. Incubate the mix for 1 to 3 hours in the dark at room temperature.
- 4. Perform flow cytometry with FITC filter set (488 nm laser with 530/30 nm filter).

EXAMPLE DATA ANALYSIS AND FIGURES

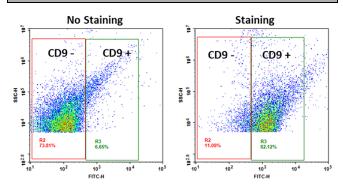


Figure 1. Exosomes from 100,000 HeLa cells (cultured for 16 hours in 10 mL serum-free medium) were isolated using ReadiPrep™ Exosome Isolation Kit (Cat# 60204) and detected using the Cell Navigator™ Flow Cytometric Exosome Staining Kit (Cat# 22426).

DISCLAIMER

AAT Bioquest provides high-quality reagents and materials for research use only. For proper handling of potentially hazardous chemicals, please consult the Safety Data Sheet (SDS) provided for the product. Chemical analysis and/or reverse engineering of any kit or its components is strictly prohibited without written permission from AAT Bioquest. Please call 408-733-1055 or email info@aatbio.com if you have any questions.