

Polyclonal Anti-mouse/rat Neuropilin-1- Fluorescein

Catalog Number: FAB566F

Lot Number: AAZC02

100 Tests

Reagents Provided

Carboxyfluorescein (CFS)-conjugated goat polyclonal anti-mouse/rat Neuropilin-1: Supplied as 50 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Antibody type: goat IgG

Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

Storage

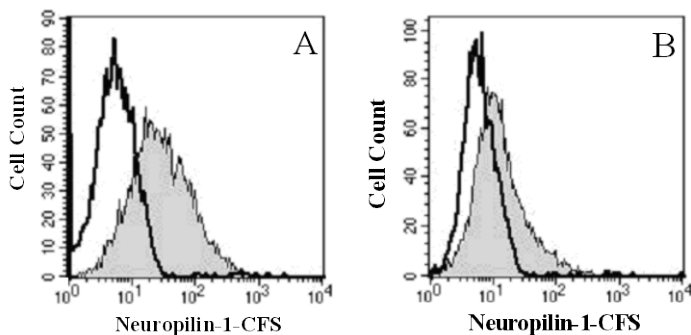
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing Neuropilin-1 within a population and qualitatively determine the density of Neuropilin-1 on cell surfaces by flow cytometry.

Product Description

Neuropilin-1 was produced in goats immunized with purified, NS0-derived, recombinant rat Neuropilin-1 (rrNeuropilin-1) extracellular domain. Neuropilin-1 specific IgG was purified by rat Neuropilin-1 affinity chromatography. The purified antibody was then conjugated to CFS fluorochrome. Cell surface expression of Neuropilin-1 is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 515 - 545 nm.



A) Mouse bEND.3 and B) Rat PC-12 cells were stained with CFS-conjugated anti-mouse/rat Neuropilin-1 (Catalog # FAB566F, filled histogram) or CFS-conjugated isotype control (Catalog # IC108F, open histogram).

Background Information

Neuropilin-1 is a type I transmembrane protein that is expressed in the developing nervous system and by endothelial and tumor cells. Neuropilin-1 binds members of the class III secreted Semaphorin subfamily as well as some isoforms of VEGF family proteins. The amino acid sequence of rat Neuropilin-1 extracellular domain is 98% and 93% identical to that of mouse and human Neuropilin-1, respectively.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using both bEND.3 cells and PC-12 cells.

- Cells may be Fc-blocked with 1 µg of mouse IgG/ 10^5 cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 µL of conjugated antibody was added to $1 - 2.5 \times 10^5$ cells and incubated for 30 minutes at room temperature.
- Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Mouse Lyse Buffer (Catalog # FC003).
- The cells were resuspended in Flow Cytometry Staining Buffer for analysis by flow cytometry. As a control for this analysis, cells in a separate tube should be treated with CFS-labeled goat IgG antibody. This procedure may need to be modified, depending upon cell type and final utilization. Individual users may need to titrate to determine optimal reagent amount for their specific use.

Warning: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.