



Monoclonal Anti-mouse ROBO4 Antibody

ORDERING INFORMATION

Catalog Number: MAB5004

Clone: 274940

Lot Number: CAZS01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

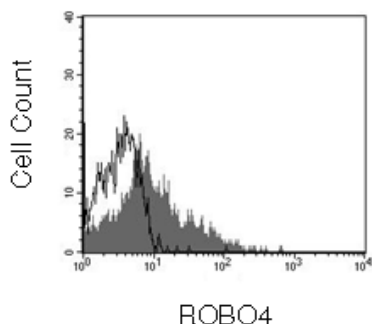
Reconstitution: sterile PBS

Specificity: mouse ROBO4

Immunogen: mouse ROBO4-transfected Y3 cells

Ig class: rat IgG_{2A}

Recommended Application:
Flow cytometry



bEnd.3 cells were stained with anti-ROBO4 (R&D Systems, Cat. # MAB5004) or isotype control (R&D Systems, Cat. # MAB006, open histogram) followed by APC-conjugated anti-rat IgG antibody (R&D Systems, Cat. # F0113).

Background

Roundabout receptors are molecular guidance proteins that function by interaction with Slit proteins to regulate axon guidance, neuronal migration, and leukocyte chemotaxis. ROBO4 expression is restricted to the endothelium and may also play a role in angiogenesis and endothelial cell migration.

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with mouse ROBO4 transfected Y3 cells (aa 28 - 1012; Accession # Q8C310). The IgG fraction of the tissue culture supernatant was purified by IgG affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects mouse ROBO4 transfectants, but not irrelevant transfectants by flow cytometry.

Application

Flow cytometry - This antibody was tested for flow cytometry using bEnd.3 cells. Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 2.5 x 10⁵ cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding a secondary developing reagent such as goat anti-rat IgG conjugated to a fluorochrome.

Optimal dilutions should be determined by each laboratory for each application.