



Anti-human 2B4/CD244/SLAMF4 Antibody

ORDERING INFORMATION

Catalog Number: AF1039

Lot Number: FWV01

Size: 100 µg

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

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human 2B4

Immunogen: NS0-derived rh2B4 extracellular domain

Ig Type: goat IgG

Applications: Activation of NK cells
Western blot
Immunohistochemistry
Flow cytometry
ELISA capture

Preparation

Produced in goats immunized with purified, NS0-derived, recombinant extracellular domain of human 2B4 (rh2B4) natural killer cell activating receptor. Human 2B4 specific IgG was purified by human 2B4 affinity chromatography.

Formulation

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

Endotoxin Level

< 0.02 EU per 1 µg of the antibody as determined by the LAL method.

Reconstitution

Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 0.1 mg/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 has been selected for its ability to recognize human 2B4 in the applications listed below. In direct ELISAs and Western blots, this antibody shows less than 5% cross-reactivity with rm2B4 and rhSLAM.

Applications

Activation of NK cells - Engagement of the NK cell surface molecule, 2B4, with agonist antibody, or with CD48 can trigger NK cell activation. The biological activity of this antibody was measured by its ability to induce IFN-γ secretion by a human NK cell line, NK-92. The ED₅₀ of this effect is typically 4 - 12 µg/mL.

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human 2B4. The detection limit for rh2B4 is approximately 2 ng/lane under non-reducing and reducing conditions.

Immunohistochemistry - This antibody will detect 2B4 in cells and tissues. The working dilution is 5 - 15 µg/mL. For chromogenic detection of labeling, use R&D Systems Cell and Tissue Staining Kits (CTS Series).

Flow cytometry - This antibody can be used at 3 - 10 µg/mL/10⁶ cells with an appropriate secondary antibody for indirect immunofluorescence staining of cells by flow cytometry.

ELISA capture - This product can be used as a capture reagent in a human 2B4 sandwich immunoassay in combination with biotinylated human 2B4 detection antibody (Cat. # BAF1039) and recombinant human 2B4 (Cat. # 1039-2B) as the standard. The suggested coating concentration range is 0.2 - 0.8 µg/mL and should be titrated to determine the optimal concentration. A general protocol is provided at www.RnDSystems.com/MAPELISA. In this format, this antibody shows less than 0.2% cross-reactivity with rm2B4, rhSLAM, rhCD48 and rhCD84.

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

For immunohistochemistry images, please refer to our website at <http://www.RnDSystems.com/ihc>.

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