Anti-mouse ESAM Antibody

ORDERING INFORMATION

Catalog Number: AF2827

Lot Number: VPX01

Size: 100 μg

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

Storage: -20° C

Reconstitution: sterile PBS

Specificity: mouse ESAM extracellular domain

Immunogen: NS0-derived rmESAM extracellular domain

Ig Type: goat IgG

Applications: Western blot
Flow cytometry
Immunohistochemistry
Direct ELISA

Preparation
Produced in goats immunized with purified, NS0-derived, recombinant mouse Endothelial cell-Selective Adhesion Molecule (rmESAM) extracellular domain. Mouse ESAM specific IgG was purified by mouse ESAM affinity chromatography. ESAM is a 55 kDa type I transmembrane glycoprotein belonging to the CTX (cortical thymocyte marker in *Xenopus*) family of cell adhesion molecules within the immunoglobulin superfamily. Other family members are CXADR, CLMP, JAM-A-C, CD2, A33, and BT-IgSF. The extracellular region of ESAM contains one V-type and one C2-type Ig domain and is involved in homophilic adhesion. Mouse ESAM extracellular domain shares 69% amino acid sequence identity with the corresponding region of human ESAM. ESAM is expressed on endothelial cells, activated platelets and megakaryocytes and can be found associated with cell-to-cell junctions.

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

Endotoxin Level
< 0.1 EU per 1 μg of the antibody as determined by the LAL method.

Reconstitution
Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 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 mouse ESAM in the applications listed below. In direct ELISAs and western blots, this antibody shows approximately 15% cross-reactivity with rhESAM.

Applications
Western blot - This antibody can be used at 0.1 - 0.2 μg/mL with the appropriate secondary reagents to detect mouse ESAM. The detection limit for rmESAM is approximately 5 ng/lane under non-reducing and reducing conditions.

Flow Cytometry - This antibody has been tested on bEnd.3 cells for use in flow cytometry. Dilute this antibody to 50 μg/mL and add 10 μL of the diluted solution to 1 - 2.5 x 10^5 cells in a total reaction volume not exceeding 200 μL. The binding of unlabeled antibodies may be visualized by adding 10 μL of a 25 μg/mL stock solution of a secondary developing reagent such as anti-goat IgG conjugated to a fluorochrome.

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

Direct ELISA - This antibody can be used at 0.5 - 1.0 μg/mL with the appropriate secondary reagents to detect mouse ESAM. The detection limit for rmESAM is approximately 0.2 ng/well.

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

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