

PE anti-mouse CD146 Antibody

Catalog# / Size	168403 / 25 µg 168404 / 100 µg
Clone	29-1709
Regulatory Status	RUO
Other Names	CD146, S-Endo 1 antigen, MUC18, MCAM, Mel-CAM, A32 antigen
Isotype	Rat IgG2b, κ
Description	CD146, also known as melanoma cell adhesion molecule (MCAM or Mel-CAM), MUC18, S-Endo1, and A32 antigen, is an integral membrane glycoprotein that belongs to the Ig superfamily. CD146 is a cell adhesion molecule that plays a role in cell-cell and cell-extracellular matrix interactions and its expression on vascular endothelial basement membranes facilitates TH17 cell entry into tissues. CD146 is strongly expressed by murine vascular endothelial cells, a subset of NK1.1-positive cells, and neutrophils. In mice, CD146 is a marker of natural killer cell maturation. Combined with using CD27 and CD11b staining, CD146 may be an alternative marker to detect final stages of NK cell maturation and define NK cell subsets. CD146+ NK cells were found to be less cytotoxic and to produce less IFNγ than CD146- NK cells upon stimulation with target cells or activating antibodies.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	0.2 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 0.125 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
RRID	AB_3717151 (BioLegend Cat. No. 168403) AB_3717151 (BioLegend Cat. No. 168404)

Antigen Details

Structure	CD146 is a transmembrane glycoprotein and belongs to the Ig superfamily of cell adhesion molecules.
Distribution	CD146 is strongly expressed by murine vascular endothelial cells, a subset of NK1.1+ cells, and

neutrophils.

Function	CD146 has been reported to be functionally relevant for endothelial cell adhesion, angiogenesis, and NK cell function.
Interaction	Endothelial cells, Mesenchymal Stem Cells, Neutrophils
Ligand/Receptor	Laminin-411
Cell Type	Endothelial cells, Epithelial cells, Mesenchymal cells, Mesenchymal Stem Cells, T cells
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers, Stem Cells
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Despoix N, <i>et al.</i> 2008. <i>Eur. J. Immunol.</i> 38:2855. 2. Sorrentino A, <i>et al.</i> 2008. <i>Exp. Hematol.</i> 36:1035. 3. Bardin N, <i>et al.</i> 2009. <i>Arterioscler. Thromb. Vasc. Biol.</i> 29:746. 4. Flanagan K, <i>et al.</i> 2012. <i>PLOS One.</i> 7:e40443.

Gene ID [84004](#)

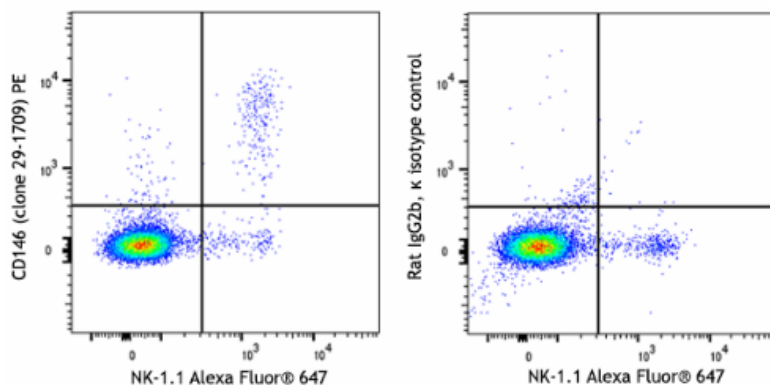
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-mouse CD146

Product Data



C57BL/6 splenocytes were stained with anti-mouse NK-1.1 (clone PK136) Alexa Fluor® 647 and anti-mouse CD146 (clone 29-1709) PE (left) or rat IgG2b, κ PE isotype control (right).

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