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CD244 Monoclonal Antibody
Mouse Anti Human Monoclonal Antibody
Catalog # ABV11719

Specification

CD244 Monoclonal Antibody - Product Information

Application	**FC, IP**
Primary Accession	Q9BZW8
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**41616**

CD244 Monoclonal Antibody - Additional Information

Gene ID 51744

Positive Control	**FC**
Application & Usage	**FC, IP**

Other Names
Natural killer cell receptor 2B4, NK cell activation-inducing ligand, NAIL, NK cell type I receptor protein 2B4, NKR2B4, h2B4, SLAM family member 4, SLAMF4, Signaling lymphocytic activation molecule 4, CD244, CD244, 2B4

Target/Specificity
CD244

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
PBS with 0.09% (W/V) sodium azide.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
CD244 Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CD244 Monoclonal Antibody - Protein Information

Name CD244

Synonyms 2B4

Function
Heterophilic receptor of the signaling lymphocytic activation molecule (SLAM) family; its ligand is CD48. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. Acts as activating natural killer (NK) cell receptor (PubMed:10359122, PubMed:11714776, PubMed:8376943). Activating function implicates association with SH2D1A and FYN (PubMed:15713798). Downstreaming signaling involves predominantly VAV1, and, to a lesser degree, INPP5D/SHIP1 and CBL. Signal attenuation in the absence of SH2D1A is proposed to be dependent on INPP5D and to a lesser extent PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed:10934222, PubMed:15713798). Stimulates NK cell cytotoxicity, production of IFN-gamma and granule exocytosis (PubMed:11714776, PubMed:8376943). Optimal expansion and activation of NK cells seems to be dependent on the engagement of CD244 with CD48 expressed on neighboring NK cells (By similarity). Acts as costimulator in NK activation by enhancing signals by other NK receptors such as NCR3 and NCR1 (PubMed:10741393). At early stages of NK cell differentiation may function as an inhibitory receptor possibly ensuring the self-tolerance of developing NK cells (PubMed:11917118). Involved in the regulation of CD8(+) T-cell proliferation; expression on activated T-cells and binding to CD48 provides costimulatory-like function for neighboring T-cells (By similarity). Inhibits inflammatory responses in dendritic cells (DCs) (By similarity).

Cellular Location
Membrane; Single- pass type I membrane protein. Cell membrane. Membrane raft Note=Receptor engagement results in a recruitment to lipid drafts essential for the subsequent tyrosine phosphorylation of the ITSMs

Tissue Location
Expressed in spleen, PBL, followed by lung, liver, testis and small intestine. Expressed in all natural killer (NK) cells, monocytes and basophils, TCR-gamma/delta+ T-cells, monocytes, basophils, and on a subset of CD8(+) T-cells

CD244 Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

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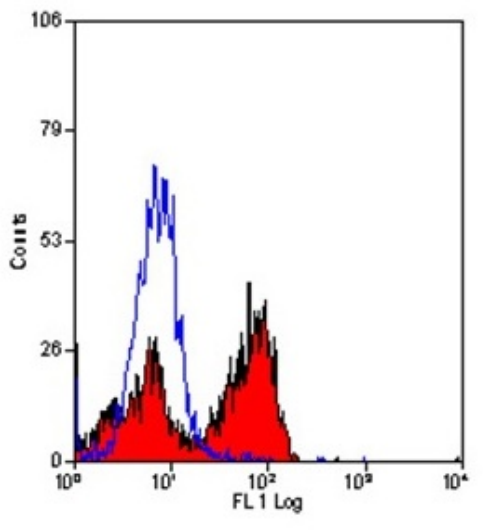
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD244 Monoclonal Antibody - Images



Staining of human peripheral blood lymphocytes with Mouse anti Human CD244

CD244 Monoclonal Antibody - Background

Mouse anti-Human CD244 antibody, clone 2B4.69 recognizes the CD244 cell surface antigen, also known as natural killer receptor 2B4 (NKG2B4). CD244 is a 370 amino acid single pass type I transmembrane glycoprotein with two Ig-like V type domains. CD244 is a member of the SLAM family of receptors which is expressed on natural killer (NK) cells, gamma delta T cells, CD14+ monocytes, and a subset of CD8+ T cells.CD244 was originally identified as an activating receptor on NK cells, although recent studies suggest that the receptor may have a wide range of activities including NK cell activation, costimulation, or even inhibition, depending on the cell type and stage of differentiation. The ligand of CD244 is CD48, a GPI-anchored membrane protein also belonging to the SLAM family.