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CD244 Monoclonal Antibody

Mouse Anti Human Monoclonal Antibody
Catalog # ABV11719

Product Information

Application	FC, IP
Primary Accession	Q9BZW8
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	2B4.69
Calculated MW	41616

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.

Protein Information

Name	CD244
Synonyms	2B4

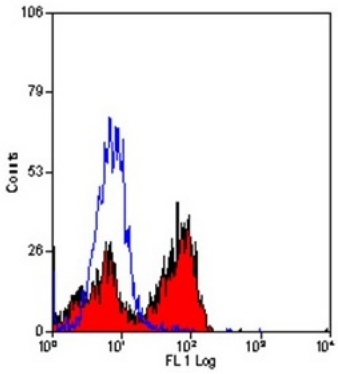
Function	Heterophilic receptor of the signaling lymphocytic activation molecule (SLAM) family; its ligand is CD48. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation 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

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.

Images

Staining of human peripheral blood lymphocytes with Mouse anti Human CD244



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.