

ARG43374 anti-CD244 phospho (Tyr271) antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes CD244 phospho (Tyr271)
Tested Reactivity	Hu
Tested Application	WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	CD244
Species	Human
Immunogen	Phosphospecific peptide around Tyr271 of Human CD244 (NP_057466.1). (Sequence: C-EFLTIpYEDVKD)
Conjugation	Un-conjugated
Alternate Names	NK cell activation-inducing ligand; h2B4; Natural killer cell receptor 2B4; CD antigen CD244; 2B4; NAIL; NKR2B4; SLAM family member 4; Nmrk; SLAMF4; Signaling lymphocytic activation molecule 4; NK cell type I receptor protein 2B4

Application Instructions

Application table	Application	Dilution
	WB	1 - 3 µg/ml
Application Note	WB: Recommend incubate at RT for 1h. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human Natural Killer cells + Pervanadate treatment	
Observed Size	~ 75 kDa	

Properties

Form	Liquid
Purification	Affinity purified
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

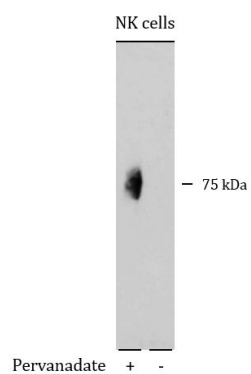
before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CD244
Gene Full Name	CD244 molecule, natural killer cell receptor 2B4
Background	This gene encodes a cell surface receptor expressed on natural killer (NK) cells (and some T cells) that mediate non-major histocompatibility complex (MHC) restricted killing. The interaction between NK-cell and target cells via this receptor is thought to modulate NK-cell cytolytic activity. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]
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:8376943, PubMed:11714776). 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:8376943, PubMed:11714776). 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). [UniProt]
Calculated Mw	42 kDa
PTM	<p>N-linked glycosylation is essential for the binding to its ligand CD48. Also O-glycosylated, in contrast, O-linked sialylation has a negative impact on ligand binding.</p> <p>Phosphorylated by FYN and CSK on tyrosine residues following activation. Coligation with inhibitory receptors such as KIR2DL1 inhibits phosphorylation upon contact of NK cells with sensitive target cells. [UniProt]</p>
Cellular Localization	Membrane; Single-pass type I membrane protein. Cell membrane. Note=Receptor engagement results in a recruitment to lipid drafts essential for the subsequent tyrosine phosphorylation of the ITSMs. [UniProt]



ARG43374 anti-CD244 phospho (Tyr271) antibody WB image

Western blot: Staining of IP from a lysate of Human Natural Killer cells with (+) or without (-) pervanadate treatment of the cells. Samples were stained with ARG43374 anti-CD244 phospho (Tyr271) antibody at 2 µg/ml dilution and incubated at RT for 1 hour.