

Anti-CD244/2B4/SLAMF4 (Extracellular region) M085 Antibody

Catalog # AN1708

Specification

Anti-CD244/2B4/SLAMF4 (Extracellular region) M085 Antibody - Product Information

Application WB
Primary Accession Q9BZW8
Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
Calculated MW 41616

Anti-CD244/2B4/SLAMF4 (Extracellular region) M085 Antibody - Additional Information

Gene ID **51744**

Other Names

Natural killer cell receptor 2B4, 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

Target/Specificity

CD244 (Natural killer (NK) cell receptor 2B4/SLAMF4) is an Ig superfamily signaling lymphocyte activation molecule (SLAM) receptor. Like all SLAM family receptors, it has an extracellular segment with two immunoglobulin (Ig)-like domains, and a cytoplasmic domain containing four immunoreceptor tyrosine-based switch motifs. CD244 does not act as a selfligand similar to other SLAM family receptors. It binds CD48, a transmembrane receptor ubiquitously expressed on hematopoietic cells. CD244 activity is controlled by the presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. Downstream signaling involves predominantly VAV1, and, to a lesser degree, INPP5D/SHIP1 and CBL. Activation of CD244 stimulates NK cell cytotoxicity, production of IFN-γ and granule exocytosis. CD244 is involved in the regulation of CD8+ T-cell proliferation, and inhibits inflammatory responses in dendritic cells (DCs). In cancers, CD244 shows increased expression in intratumoral DCs and myeloid suppressor cells, and anti-CD244 therapies may increase infiltrating T-cells and impair tumor growth.

Format

Protein G Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-CD244/2B4/SLAMF4 (Extracellular region) M085 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

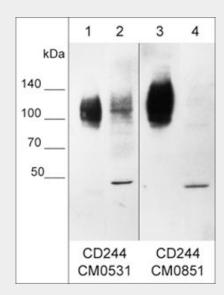


Anti-CD244/2B4/SLAMF4 (Extracellular region) M085 Antibody - Protocols

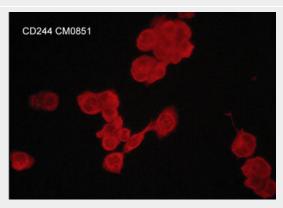
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-CD244/2B4/SLAMF4 (Extracellular region) M085 Antibody - Images

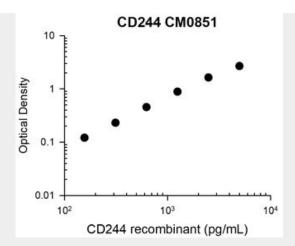


Western blot of native (lane 1 and 3) and denatured (lane 2 and 4) lysates of human THP-1 monocytes. The blot was probed with mouse monoclonals anti-CD244/2B4/SLAMF4 (CM0531) (lanes 1 and 2) or anti-CD244/2B4/SLAMF4 (CM0851). Both antibodies were used at 1:250.



Immunocytochemical labeling of CD244 in aldehyde fixed and NP-40 permeabilized PMA-differentiated human THP-1 cells. The cells were labeled with mouse monoclonal anti-CD244/2B4/SLAMF4 (CM0851). The antibody was detected using goat anti-mouse DyLight® 594.





Representative Standard Curve using mouse monoclonal anti-CD244 (CM0851) for ELISA capture of human recombinant CD244 extracellular region with a His-tag. Captured protein was detected by suitable anti-His-tag antibody followed by appropriate secondary antibody HRP conjugate.

Anti-CD244/2B4/SLAMF4 (Extracellular region) M085 Antibody - Background

CD244 (Natural killer (NK) cell receptor 2B4/SLAMF4) is an Ig superfamily signaling lymphocyte activation molecule (SLAM) receptor. Like all SLAM family receptors, it has an extracellular segment with two immunoglobulin (Ig)-like domains, and a cytoplasmic domain containing four immunoreceptor tyrosine-based switch motifs. CD244 does not act as a selfligand similar to other SLAM family receptors. It binds CD48, a transmembrane receptor ubiquitously expressed on hematopoietic cells. CD244 activity is controlled by the presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. Downstream signaling involves predominantly VAV1, and, to a lesser degree, INPP5D/SHIP1 and CBL. Activation of CD244 stimulates NK cell cytotoxicity, production of IFN-γ and granule exocytosis. CD244 is involved in the regulation of CD8+ T-cell proliferation, and inhibits inflammatory responses in dendritic cells (DCs). In cancers, CD244 shows increased expression in intratumoral DCs and myeloid suppressor cells, and anti-CD244 therapies may increase infiltrating T-cells and impair tumor growth.