

LILRB4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12297A

Specification

LILRB4 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O8NHJ6</u> <u>NP_006838.3</u>, <u>NP_001074907.1</u> Human Rabbit Polyclonal Rabbit IgG 49356 44-73

LILRB4 Antibody (N-term) - Additional Information

Gene ID 11006

Other Names

Leukocyte immunoglobulin-like receptor subfamily B member 4, CD85 antigen-like family member K, Immunoglobulin-like transcript 3, ILT-3, Leukocyte immunoglobulin-like receptor 5, LIR-5, Monocyte inhibitory receptor HM18, CD85k, LILRB4, ILT3, LIR5

Target/Specificity

This LILRB4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 44-73 amino acids from the N-terminal region of human LILRB4.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

LILRB4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LILRB4 Antibody (N-term) - Protein Information

Name LILRB4



Synonyms ILT3, LIR5

Function Inhibitory receptor involved in the down-regulation of the immune response and the development of immune tolerance (PubMed:<u>11875462</u>). Receptor for FN1 (PubMed:<u>34089617</u>). Receptor for apolipoprotein APOE (PubMed:<u>30333625</u>). Receptor for ALCAM/CD166 (PubMed:<u>29263213</u>). Inhibits receptor-mediated phosphorylation of cellular proteins and mobilization of intracellular calcium ions (PubMed:<u>9151699</u>). Inhibits FCGR1A/CD64-mediated monocyte activation by inducing phosphatase-mediated down-regulation of the phosphorylation of multiple proteins including LCK, SYK, LAT and ERK, leading to a reduction in TNF production (PubMed:<u>19833736</u>). This inhibition of monocyte activation occurs at least in part via binding to FN1 (PubMed:<u>34089617</u>). Inhibits T cell proliferation, inducing anergy, suppressing the differentiation of IFNG-producing CD8+ cytotoxic T cells and enhancing the generation of CD8+ T suppressor cells (PubMed:<u>16493035</u>, PubMed:<u>19833736</u>). Interferes with TNFRSF5-signaling and NF-kappa-B up-regulation (PubMed:<u>11875462</u>).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Note=Ligand binding leads to internalization and translocation to an antigen-processing compartment

Tissue Location

Detected on monocytes, macrophages, dendritic cells, natural killer cells and B-cells (at protein level). Expressed in the lung.

LILRB4 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture
- LILRB4 Antibody (N-term) Images



LILRB4 Antibody (N-term) (Cat. #AP12297a) western blot analysis in MDA-MB435 cell line lysates



(35ug/lane). This demonstrates the LILRB4 antibody detected the LILRB4 protein (arrow).

LILRB4 Antibody (N-term) - Background

This gene is a member of the leukocyte immunoglobulin-like receptor (LIR) family, which is found in a gene cluster at chromosomal region 19q13.4. The encoded protein belongs to the subfamily B class of LIR receptors which contain two or four extracellular immunoglobulin domains, a transmembrane domain, and two to four cytoplasmic immunoreceptor tyrosine-based inhibitory motifs (ITIMs). The receptor is expressed on immune cells where it binds to MHC class I molecules on antigen-presenting cells and transduces a negative signal that inhibits stimulation of an immune response. The receptor can also function in antigen capture and presentation. It is thought to control inflammatory responses and cytotoxicity to help focus the immune response and limit autoreactivity. Multiple transcript variants encoding different isoforms have been found for this gene.

LILRB4 Antibody (N-term) - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010) Lu, H.K., et al. J. Biol. Chem. 284(50):34839-34848(2009) Jones, D.C., et al. Eur. J. Immunol. 39(11):3195-3206(2009) Brenk, M., et al. J. Immunol. 183(1):145-154(2009) Brown, D.P., et al. BMC Immunol. 10, 56 (2009) :