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# LILRB4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12297A

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q8NHJ6 |
| **Other Accession** | NP_006838.3, NP_001074907.1 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB31065 |
| **Calculated MW** | 49356 |
| **Antigen Region** | 44-73 |

## Additional Information

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| **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 0.05% (V/V) Proclin 300. 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. |

## Protein Information

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| **Name** | LILRB4 |
| **Synonyms** | ILT3, LIR5 |

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| **Function** | Inhibitory receptor involved in the down-regulation of the immune response and the development of immune tolerance (PubMed:11875462). Receptor for FN1 (PubMed:34089617). Receptor for apolipoprotein APOE (PubMed:30333625). Receptor for ALCAM/CD166 (PubMed:29263213). Inhibits receptor-mediated phosphorylation of cellular proteins and mobilization of intracellular calcium ions (PubMed:9151699). 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:19833736). This inhibition of monocyte activation occurs at least in part via binding to FN1 (PubMed:34089617). 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:16493035, PubMed:19833736, PubMed:29263213). Induces up- regulation of CD86 on dendritic cells (PubMed:19860908). Interferes with TNFRSF5-signaling and NF-kappa-B up-regulation (PubMed:11875462). |
| **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. |

## Background

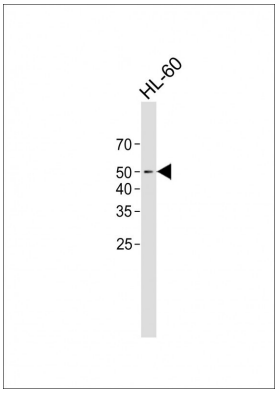
This gene is a member of the leukocyte immunoglobulin-like receptor (LIR) family, which is found in a gene cluster at chromosomal region 19q13.4. The encoded protein belongs to the subfamily B class of LIR receptors which contain two or four extracellular immunoglobulin domains, a transmembrane domain, 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.

## 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) :


## Images

All lanes: Anti-LILRB4 Antibody (N-term) at 1:500 dilution + HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 50 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

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