

LILRB1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17048c**Specification**

LILRB1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q8NHL6](#)**LILRB1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 10859**Other Names**

Leukocyte immunoglobulin-like receptor subfamily B member 1, LIR-1, Leukocyte immunoglobulin-like receptor 1, CD85 antigen-like family member J, Immunoglobulin-like transcript 2, ILT-2, Monocyte/macrophage immunoglobulin-like receptor 7, MIR-7, CD85j, LILRB1, ILT2, LIR1, MIR7

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LILRB1 Antibody (Center) Blocking Peptide - Protein Information**Name** LILRB1 {ECO:0000303|PubMed:20600445, ECO:0000312|HGNC:HGNC:6605}**Function**

Receptor for class I MHC antigens. Recognizes a broad spectrum of HLA-A, HLA-B, HLA-C, HLA-G and HLA-F alleles (PubMed:16455647, PubMed:28636952). Receptor for H301/UL18, a human cytomegalovirus class I MHC homolog. Ligand binding results in inhibitory signals and down-regulation of the immune response. Engagement of LILRB1 present on natural killer cells or T-cells by class I MHC molecules protects the target cells from lysis. Interaction with HLA-B or HLA-E leads to inhibition of FCER1A signaling and serotonin release. Inhibits FCGR1A-mediated phosphorylation of cellular proteins and mobilization of intracellular calcium ions (PubMed:11907092, PubMed:9285411, PubMed:9842885). Recognizes HLA-G in complex with B2M/beta-2 microglobulin and a nonamer self-peptide (PubMed:16455647). Upon interaction with peptide-bound HLA-G-B2M complex, triggers secretion of growth-promoting

factors by decidual NK cells (PubMed:29262349, PubMed:19304799). Reprograms B cells toward an immune suppressive phenotype (PubMed:24453251).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Expressed in B cells, monocytes and various dendritic cell (DC) subsets including myeloid, plasmacytoid and tolerogenic DCs (at protein level) (PubMed:20448110, PubMed:9285411, PubMed:9842885, PubMed:24453251). Expressed in decidual macrophages (at protein level) (PubMed:19304799). Expressed in decidual NK cells (at protein level) (PubMed:29262349).

LILRB1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

LILRB1 Antibody (Center) Blocking Peptide - Images

LILRB1 Antibody (Center) Blocking Peptide - 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. 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.

LILRB1 Antibody (Center) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Davidson, C.L., et al. Hum. Immunol. 71(10):942-949(2010) Huang, J., et al. J. Virol. 84(18):9463-9471(2010) Godal, R., et al. Biol. Blood Marrow Transplant. 16(5):612-621(2010) Lamar, D.L., et al. Blood 115(16):3278-3286(2010)