

LAIR1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13784c**Specification**

LAIR1 Antibody (Center) Blocking peptide - Product InformationPrimary Accession [Q6GTX8](#)**LAIR1 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 3903**Other Names**

Leukocyte-associated immunoglobulin-like receptor 1, LAIR-1, hLAIR1, CD305, LAIR1, CD305

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13784c was selected from the Center region of LAIR1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

LAIR1 Antibody (Center) Blocking peptide - Protein Information**Name** LAIR1**Synonyms** CD305**Function**

Functions as an inhibitory receptor that plays a constitutive negative regulatory role on cytolytic function of natural killer (NK) cells, B-cells and T-cells. Activation by Tyr phosphorylation results in recruitment and activation of the phosphatases PTPN6 and PTPN11. It also reduces the increase of intracellular calcium evoked by B-cell receptor ligation. May also play its inhibitory role independently of SH2-containing phosphatases. Modulates cytokine production in CD4+ T- cells, down-regulating IL2 and IFNG production while inducing secretion of transforming growth factor beta. Down-regulates also IgG and IgE production in B-cells as well as IL8, IL10 and TNF secretion. Inhibits proliferation and induces apoptosis in myeloid leukemia cell lines as well as prevents nuclear translocation of NF-kappa-B p65 subunit/RELA and phosphorylation of I-kappa-B alpha/CHUK in these cells. Inhibits the differentiation of peripheral blood precursors towards dendritic cells.

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Expressed on the majority of peripheral mononuclear cells, including natural killer (NK) cells, T-cells, B-cells, monocytes, and dendritic cells. Highly expressed in naive T-cells and B-cells but no expression on germinal center B-cells. Abnormally low expression in naive B-cells from HIV-1 infected patients. Very low expression in NK cells from a patient with chronic active Epstein-Barr virus infection.

LAIR1 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

LAIR1 Antibody (Center) Blocking peptide - Images**LAIR1 Antibody (Center) Blocking peptide - Background**

The protein encoded by this gene is an inhibitory receptor found on peripheral mononuclear cells, including NK cells, T cells, and B cells. Inhibitory receptors regulate the immune response to prevent lysis of cells recognized as self. The gene is a member of both the immunoglobulin superfamily and the leukocyte-associated inhibitory receptor family. The gene maps to a region of 19q13.4 called the leukocyte receptor cluster, which contains at least 29 genes encoding leukocyte-expressed receptors of the immunoglobulin superfamily.

LAIR1 Antibody (Center) Blocking peptide - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010) Brondijk, T.H., et al. Blood 115(7):1364-1373(2010) Tang, X., et al. J. Immunol. 182(9):5446-5452(2009) Lebbink, R.J., et al. Matrix Biol. 28(4):202-210(2009) Xue, J.N., et al. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi 24(4):373-374(2008)