10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LAIR1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13784c

Specification

LAIR1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q6GTX8
Other Accession	NP_002278.1, NP_068352.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**31469**
Antigen Region	**177-206**

LAIR1 Antibody (Center) - Additional Information

Gene ID 3903

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

Target/Specificity
This LAIR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 177-206 amino acids from the Central region of human LAIR1.

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
LAIR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

LAIR1 Antibody (Center) - 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. Also down-regulates 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

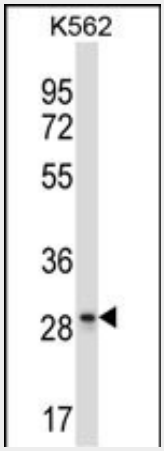
Tissue Location
Expressed on the majority of peripheral mononuclear cells, including natural killer (NK) cells, T-cells, B-cells, monocytes, and dendritic cells. Highly expressed in naive T-cells and B-cells but no expression on germinal center B-cells. Abnormally low expression in naive B-cells from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

LAIR1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LAIR1 Antibody (Center) - Images



LAIR1 Antibody (Center) (Cat. #AP13784c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the LAIR1 antibody detected the LAIR1 protein (arrow).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LAIR1 Antibody (Center) - 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) - 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)