

LAIR1 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3116a

Specification

LAIR1 Antibody (internal region) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW

WB, E <u>O6GTX8</u> <u>NP_002278.1</u>, <u>NP_068352.1</u>, <u>3903</u> Human Goat Polyclonal 0.5 mg/ml IgG 31469

LAIR1 Antibody (internal region) - Additional Information

Gene ID 3903

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

Dilution WB~~1:1000 E~~N/A

Format 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

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

LAIR1 Antibody (internal region) - 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

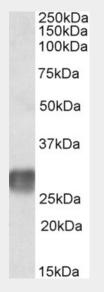
Expressed on the majority of peripheral mononuclear cells, including natural killer (NK) cells, T-cells, B-cells, monocytes, and dendritic cells. Highly expressed in naive T-cells and B-cells but no expression on germinal center B-cells. Abnormally low expression in naive B-cells from HIV-1 infected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

LAIR1 Antibody (internal region) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

LAIR1 Antibody (internal region) - Images



AF3116a (2 μ g/ml) staining of Human Lymph Node lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



LAIR1 Antibody (internal region) - Background

This antibody is expected to recognize both isoforms (NP_002278.1; NP_068352.1).

LAIR1 Antibody (internal region) - References

A single residue, arginine 65, is critical for the functional interaction of leukocyte-associated inhibitory receptor-1 with collagens. Tang X, Narayanan S, Peruzzi G, Apara A, Natarajan K, Margulies DH, Coligan JE, Borrego F, Journal of immunology (Baltimore, Md. : 1950) 2009 May 182 (9): 5446-52. PMID: 19380792