

# Product datasheet

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# ARG56903 anti-CD305 / LAIR1 antibody

Package: 100 μl Store at: -20°C

## **Summary**

Product Description Rabbit Polyclonal antibody recognizes CD305 / LAIR1

Tested Reactivity Hu

Tested Application WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CD305 / LAIR1

Species Human

Immunogen Recombinant protein of Human CD305 / LAIR1.

Conjugation Un-conjugated

Alternate Names LAIR-1; hLAIR1; CD305; CD antigen CD305; Leukocyte-associated immunoglobulin-like receptor 1

## **Application Instructions**

| Application table | Application  | Dilution        |
|-------------------|--|-----------------|
|                   | WB   | 1:1000 - 1:4000 |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                 |
| Positive Control  | Rat liver, Mouse lung and Jurkat   |                 |
| Observed Size     | 35 kDa   |                 |

#### **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

LAIR1

Gene Full Name

leukocyte-associated immunoglobulin-like receptor 1

Background

The protein encoded by this gene is an inhibitory receptor found on peripheral mononuclear cells, including natural killer 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. The encoded protein has been identified as an anchor for tyrosine phosphatase SHP-1, and may induce cell death in myeloid leukemias. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

**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. [UniProt]

Calculated Mw

31 kDa

PTM

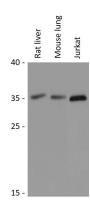
Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK.

N-glycosylated. [UniProt]

Cellular Localization

Cell membrane; Single-pass type I membrane protein. [UniProt]

#### **Images**



#### ARG56903 anti-CD305 / LAIR1 antibody WB image

Western blot: 25  $\mu g$  of Rat liver, Mouse lung and Jurkat cell lysates stained with ARG56903 anti-CD305 / LAIR1 antibody at 1:1000 dilution.