Product Name: **CD305 Rabbit Polyclonal Antibody**
Catalog #: **APRab08347**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	32kDa

Antigen Information

Gene Name	LAIR1
Alternative Names	LAIR1; CD305; Leukocyte-associated immunoglobulin-like receptor 1; LAIR-1; hLAIR1; CD305
Gene ID	3903.0
SwissProt ID	Q6GTX8
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human LAIR1. AA range:21-70

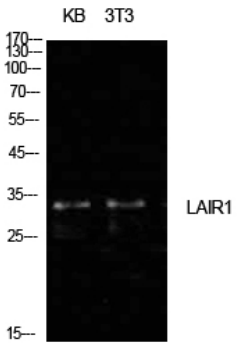
Background

The protein encoded by this gene is an inhibitory receptor found on peripheral mononuclear cells, including natural killer cells,

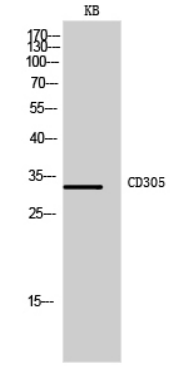
T cells, and B cells. Inhibitory receptors regulate the immune response to prevent lysis of cells recognized as self. The gene is a member of both the immunoglobulin superfamily and the leukocyte-associated inhibitory receptor family. The gene maps to a region of 19q13.4 called the leukocyte receptor 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],developmental stage:Complete loss of expression when naive B-cells proliferates and differentiates into Ig-producing plasma cells under in vitro stimulation.,domain:ITIM (immunoreceptor tyrosine-based inhibitor motif) motif is a cytoplasmic motif present in 2 copies in the intracellular part of LAIR1. When phosphorylated, ITIM motif can bind the SH2 domain of several SH2-containing phosphatases, leading to down-regulation of cell activation.,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, downregulating 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.,induction:By T-cell receptor stimulation in a process that requires p38 MAP kinase and ERK signaling.,PTM:N-glycosylated.,PTM:Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK.,similarity:Contains 1 Ig-like C2-type (immunoglobulin-like) domain.,subunit:Interacts with SH2 domains of tyrosine-protein phosphatases PTPN6 and PTPN11. The interaction with PTPN6 is constitutive. Interacts with the SH2 domain of CSK.,tissue specificity: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.,

Research Area

Image Data



Western Blot analysis of KB, NIH-3T3 cells using CD305 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Western Blot analysis of KB cells using CD305 Polyclonal Antibody. Secondary antibody was diluted at 1:20000