

## Recombinant Human LAIR1 protein, Fc-tagged

Cat. No. LAIR1-377H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human LAIR1 protein (Gln22-His163), fused to human IgG1 Fc tag at C-terminus, was expressed in human 293 cells (HEK293).
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>ProteinLength</b>	142
<b>Description</b>	<p>Leukocyte-associated immunoglobulin-like receptor-1 (LAIR-1) is constitutively expressed on the majority of human peripheral blood mononuclear leukocytes. LAIR-1 or CD305 is a transmembrane glycoprotein with a single immunoglobulin-like domain and a cytoplasmic tail containing two immune receptor tyrosine-based inhibitory motifs. LAIR-1 recruits SHP-1 and SHP-2 phosphatases upon activation, and cross-linking of the LAIR-1 antigen on natural killer (NK) cells results in strong inhibition of NK cell-mediated cytotoxicity.</p> <p>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. Diseases associated with LAIR1 include Chronic Active Epstein-Barr Virus Infection and Palindromic Rheumatism.</p>
<b>Form</b>	Lyophilized from 0.22 um filtered solution in Tris with Glycine, Arginine and NaCl,

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	pH7.5, 10% trehalose.
<b>Molecular Mass</b>	The protein has a calculated MW of 42.1 kDa. The protein migrates as 55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
<b>Endotoxin</b>	Less than 1.0 EU per ug by the LAL method.
<b>Purity</b>	>95% as determined by SDS-PAGE.
<b>Storage</b>	<p>For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.</p> <p>Please avoid repeated freeze-thaw cycles.</p> <p>This product is stable after storage at:</p> <p>-20 centigrade to -70 centigrade for 12 months in lyophilized state;            -70 centigrade for 3 months under sterile conditions after reconstitution.</p>
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

<b>Gene Name</b>	LAIR1
<b>Official Symbol</b>	LAIR1
<b>Synonyms</b>	LAIR1; leukocyte-associated immunoglobulin-like receptor 1; leukocyte associated Ig like receptor 1; CD305; hLAIR1; leukocyte-associated Ig-like receptor 1; LAIR-1
<b>Gene ID</b>	3903
<b>mRNA Refseq</b>	NM_002287

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**Protein Refseq** NP\_002278

**MIM** 602992

**UniProt ID** Q6GTX8

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