

# Human LAIR1/CD305 Protein

Cat. No. LAI-HM2R1

## Description

<b>Source</b>	Recombinant Human LAIR1/CD305 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Gln22-His163.
<b>Accession</b>	Q6GTX8-1
<b>Molecular Weight</b>	The protein has a predicted MW of 42.4 kDa. Due to glycosylation, the protein migrates to 60-70 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu$ g by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

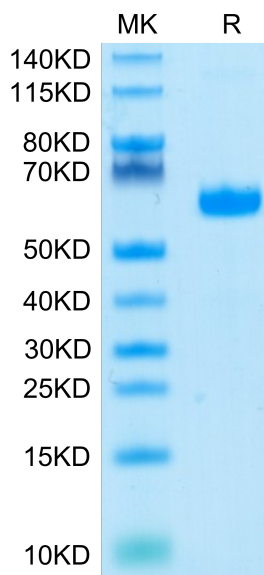
<b>Formulation</b>	Lyophilized from 0.22 $\mu$ m filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu$ g/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

LAIR1 (leukocyte-associated Ig-like receptor-1, designated CD305) is an approximately 40 kDa type I transmembrane inhibitory glycoprotein belonging to the Ig superfamily. LAIR1 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.

## Assay Data

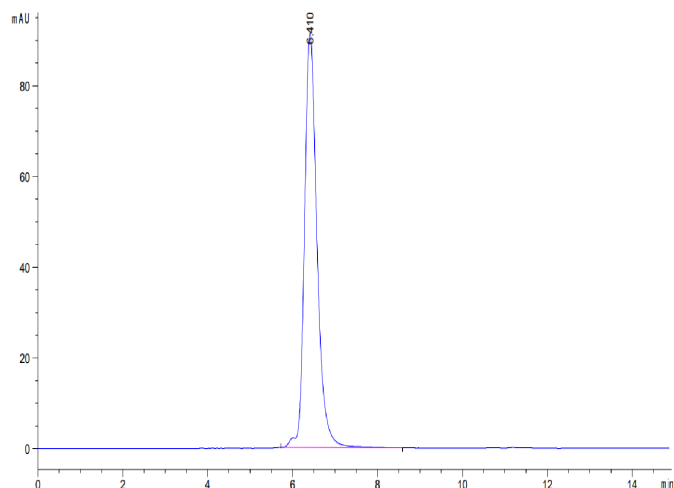
### Bis-Tris PAGE



Human LAIR1 on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

### SEC-HPLC

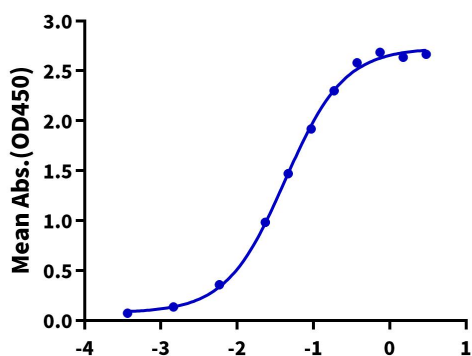
Assay Data



The purity of Human LAIR1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

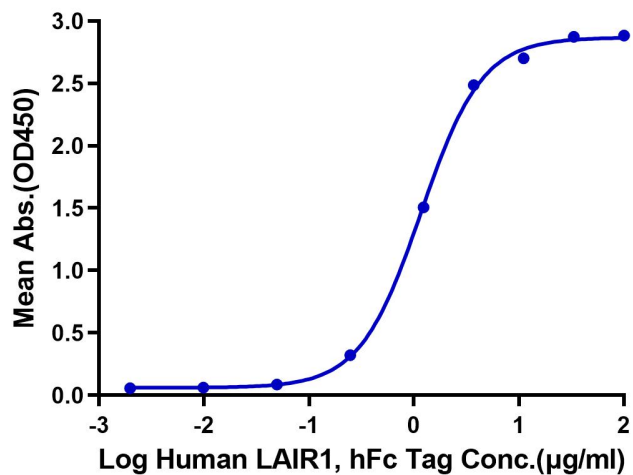
**Human LAIR1, hFc Tag ELISA**  
0.2µg Human LAIR1, hFc Tag Per Well



Immobilized Human LAIR1, hFc Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-LAIR1 Antibody, hFc Tag with the EC50 of 42.6ng/ml determined by ELISA (QC Test).

ELISA Data

**Human LAIR1, hFc Tag ELISA**  
0.2µg Human Collagen I, No Tag Per Well



Immobilized Human Collagen I, No Tag at 2µg/ml (50µl/well) on the plate. Dose response curve for Human LAIR1, hFc Tag with the EC50 of 1.17µg/ml determined by ELISA.