

# Biotinylated Human LAIR1/CD305 Protein

Cat. No. LAI-HM4R1B

## Description

<b>Source</b>	Recombinant Biotinylated Human LAIR1/CD305 Protein is expressed from HEK293 with His tag and Avi 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 18.2 kDa. Due to glycosylation, the protein migrates to 25-35 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

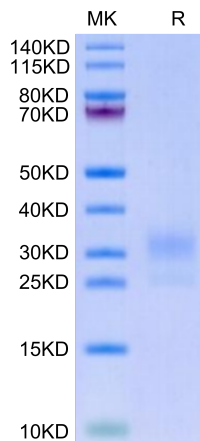
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein 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.

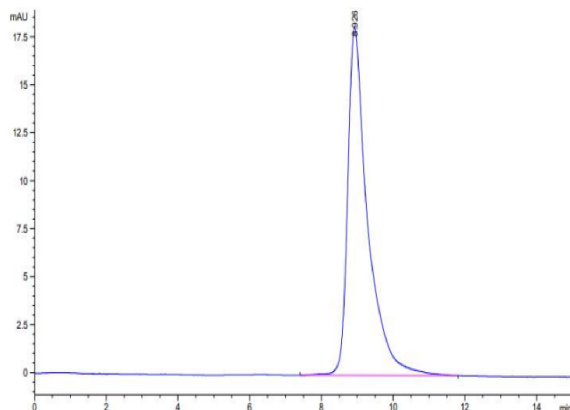
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



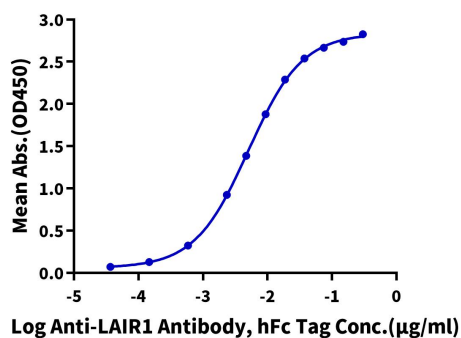
The purity of Biotinylated Human LAIR1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Biotinylated Human LAIR1, His Tag ELISA**

0.1µg Biotinylated Human LAIR1, His Tag Per Well



Immobilized Biotinylated Human LAIR1, His Tag at 1µg/ml (100µl/Well) on streptavidin (5µg/ml) precoated plate. Dose response curve for Anti-LAIR1 Antibody, hFc Tag with the EC50 of 5.1ng/ml determined by ELISA (QC Test).