

Human LAIR1/CD305 Protein, Ultra Low Endotoxin

Cat. No. LAI-HM2R1-UL

Description

Source	Recombinant Human LAIR1/CD305 Protein is expressed from HEK293 with hFc (IgG1) tag at the C-Terminus. It contains Gln22-His163.
Accession	Q6GTX8-1
Molecular Weight	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.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

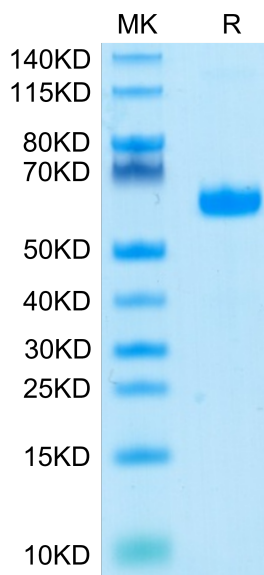
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 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

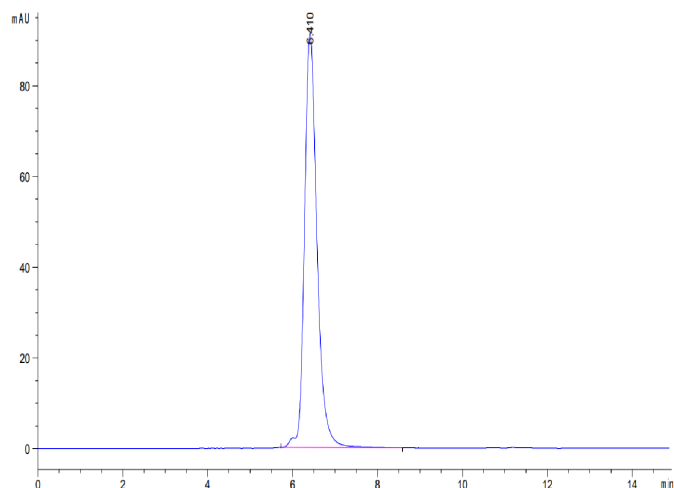
Bis-Tris PAGE



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

SEC-HPLC

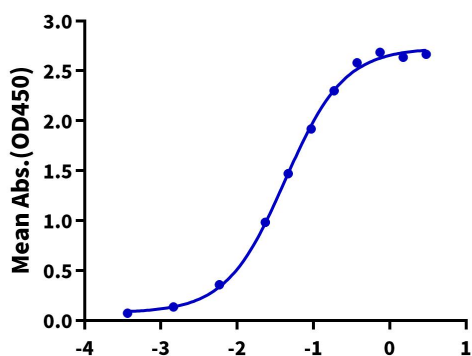
Assay Data



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

ELISA Data

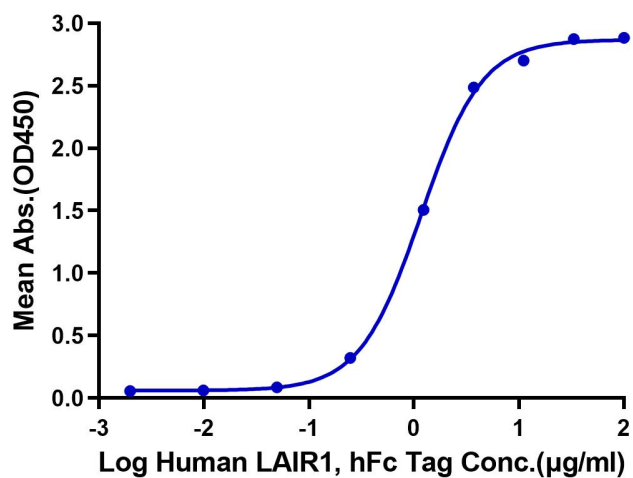
Human LAIR1, hFc Tag ELISA
0.2µg Human LAIR1, hFc Tag Per Well



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).

Log Biotinylated Anti-LAIR1 Antibody, hFc Tag Conc.(µg/ml)

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.