

Mouse LAIR1 / CD305 Protein, His Tag (MALS verified)

Catalog # LA1-M52H3



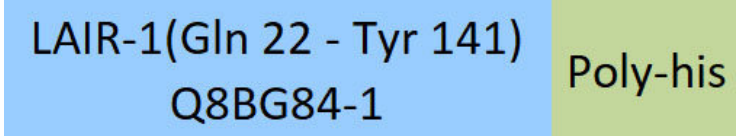
Synonym

LAIR1,CD305

Source

Mouse LAIR1 Protein, His Tag(LA1-M52H3) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Tyr 141 (Accession # [Q8BG84-1](#)).
Predicted N-terminus: Gln 22

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.
The protein has a calculated MW of 15.4 kDa. The protein migrates as 17-35 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.
>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.
Contact us for customized product form or formulation.

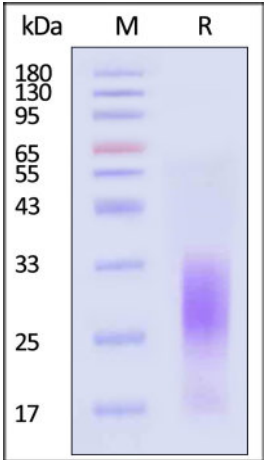
Reconstitution

Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

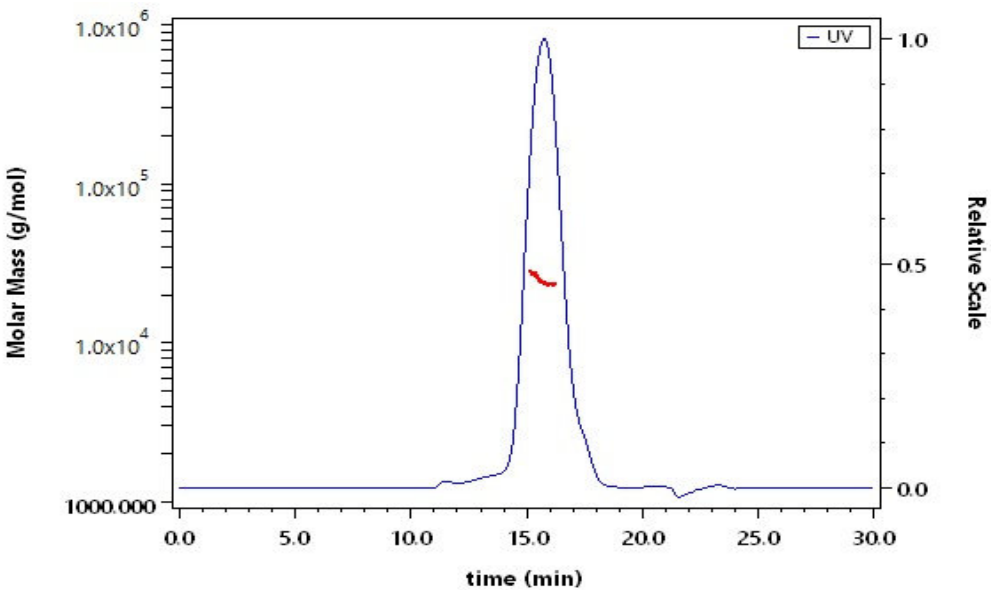
For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:
• -20°C to -70°C for 12 months in lyophilized state;
• -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse LAIR1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

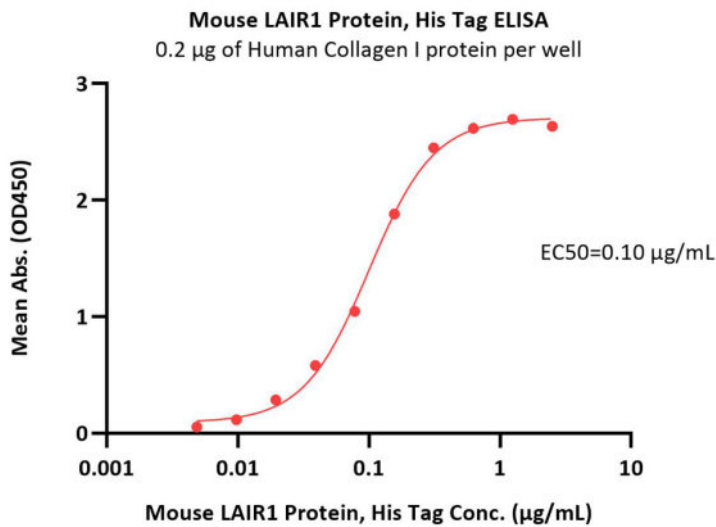
SEC-MALS



The purity of Mouse LAIR1 Protein, His Tag (Cat. No. LA1-M52H3) is more than 90% and the molecular weight of this protein is around 20-28 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA





Immobilized Human Collagen I protein at 2 µg/mL (100 µL/well) can bind Mouse LAIR1 Protein, His Tag (Cat. No. LA1-M52H3) with a linear range of 0.01-0.156 µg/mL (QC tested).

Background

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. 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.

