

LAIR1 Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	CD305;LAIR1;LAIR-1;HLAIR1
Protein Construction:	Gln22-His163
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q6GTX8-1
Molecular Weight:	18.2 kDa (predicted). Due to glycosylation, the protein migrates to 30-36 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	<ol style="list-style-type: none">1. Immobilized Human LAIR1, His Tag at 0.5μg/ml (100μl/well) on the plate. Dose response curve for Anti-LAIR1 Antibody, hFc Tag with the EC50 of 15.3ng/ml determined by ELISA.2. Human LAIR1, His Tag captured on CM5 Chip via Anti-His Antibody can bind Native Human Collagen I protein with an affinity constant of 0.082 nM as determined in SPR assay.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/ μ g of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μ m filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μ g/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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-

A DRUG SCREENING EXPERT

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.

Reference

Clinical significance of LAIR1 (CD305) as assessed by flow cytometry in a prospective series of patients with chronic lymphocytic leukemia[J]. Haematologica, 2014, 99(5):881-887.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481