

Active Recombinant Human LAIR2 protein, His/Avi-tagged, Biotinylated

Cat. No. LAIR2-053H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Recombinant Human LAIR2(Glu23-Pro152) protein, fused to His/Avi tag at the C-terminus, was expressed in HEK293 cells .
Species	Human
Source	HEK293
ProteinLength	Glu23-Pro152
Description	LAIR2 (leukocyte-associated Ig-like receptor-2; CD306) is a secreted, 131 amino acid (aa) protein that contains one Ig-like C2 type domain, making it a member of the Ig superfamily. When compared to LAIR1, its transmembrane counterpart, LAIR2 shares 83% aa identity across the signal sequence and extracellular domains (1-3). Although one is secreted and the other is membrane-bound, the two LAIR proteins are thought to have arisen from a common gene ancestor and appear to share similar adhesion profiles. This suggests that LAIR2 may compete with LAIR1 for ligand binding (3, 4). A 114 aa alternate splice form of LAIR-2 is truncated at the C-terminus, but retains the entire Ig domain (1-3). The expression profile of these splice forms, and the presence of orthologs in other species, have not been reported. LAIR2 is a soluble collagen-receptor, and it can be detected in the synovial fluid of rheumatoid arthritis patients, urine of pregnant women, and as well as primary cells (5, 6). In vitro studies have demonstrated LAIR2 can compete with LAIR1 for the same collagen binding site and suggesting LAIR2 may play an important role in immune cell activation (5, 6).

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LAIR2 can interact with complement component 1q (C1q) and mannose-binding lectin (MBL) and act as a complement inhibitor for the treatment and prevention of antibody-mediated allograft rejection and antibody-mediated clinical conditions (7).

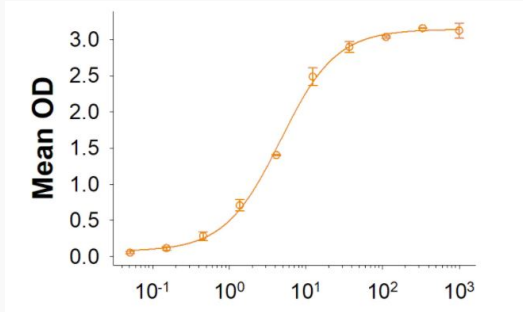
Predicted N Terminal	Glu23
Form	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
Bio-activity	Measured by its binding ability in a functional ELISA. When Bovine Collagen I is coated at 10 µg/mL, 100 µL/well, Recombinant Human LAIR2 His-tag Avi-tag binds with an ED50 of 0.75-6 ng/mL.
Molecular Mass	20-28 kDa, under reducing conditions
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Bioactivity
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 500 µg/mL in PBS.
Conjugation	Biotin

GENE INFORMATION

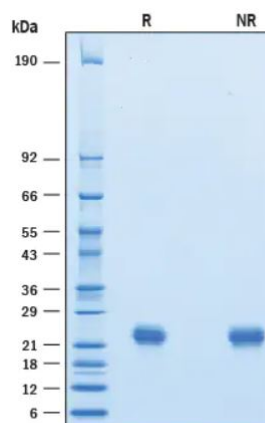
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Gene Name	LAIR2 leukocyte-associated immunoglobulin-like receptor 2 [Homo sapiens]
Official Symbol	LAIR2
Synonyms	LAIR2; leukocyte-associated immunoglobulin-like receptor 2; leukocyte associated Ig like receptor 2; CD306; LAIR-2; leukocyte-associated Ig-like receptor 2; leukocyte-associated Ig-like receptor-2; MGC71634;
Gene ID	3904
mRNA Refseq	NM_002288
Protein Refseq	NP_002279
MIM	602993
UniProt ID	Q6ISS4
Binding Activity	

SDS-PAGE



2 µg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.