



### Recombinant Human LAIR1 Fc-Fusion Protein

Cat No: Pr00238-10.9

## Product Summary

**Description:** Recombinant human LAIR1 Fc-Fusion Protein manufactured using [AbAb's Recombinant Platform](#)

**Protein:** Human LAIR1

**Fc domain:** Human IgG1

**Structure / Form:** Disulfide-linked homodimer

**Species:** Human

**Construct Design Note(s):** The extracellular domain of LAIR1 has been fused to the Fc domain of human IgG1.

**Host:** HEK293

**UniProt Accession Number:** Q6GTX8

**Alternative Description:** Leukocyte-associated immunoglobulin-like receptor 1, LAIR-1, hLAIR1, CD305; LAIR1-Ig; LAIR1-Fc chimera; LAIR1 (Fc tag)

**Published Application(s):**

**Tested Applications(s):**

**Activity:** 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. May also play its inhibitory role independently of SH2-containing phosphatases. Modulates cytokine production in CD4+ T-cells, down-regulating IL2 and IFNG production while inducing secretion of transforming growth factor beta. Down-regulates also IgG and IgE production in B-cells as well as IL8, IL10 and TNF secretion. Inhibits proliferation and induces apoptosis in myeloid leukemia cell lines as well as prevents nuclear translocation of NF-kappa-B p65 subunit/RELA and phosphorylation of I-kappa-B alpha/CHUK in these cells. Inhibits the differentiation of peripheral blood precursors towards dendritic cells [Uniprot].

## Product Form

**Purification:** IMAC purified

**Supplied in:** 0.1 mg size: PBS with preservative (0.02% Proclin 300), 1 mg size: PBS only.

**Endotoxin:** <1.0 EU/mg

**Shipping:** The product is shipped on blue ice. Upon receipt, store it immediately at the temperature recommended.

**Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals**

**Storage Recommendation:** Store at 4°C for up to 1 month. For longer term storage aliquot in small volumes and store at -20°C. Avoid repeated freeze-thaw cycles.

**SDS PAGE Purity:** >95%, as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.

**Fc-Fusion Sequence (monomer)**

QEEDLPRPSISAEPGTVIPLGSHVTFVCRGPVGVQTFRLERESRSTYNDTEDVSQASPSESEARFRIDSVSEGNAGPY  
RCIYYKPPKWSEQSDYLELLVKETSGGPDSPDTEPGSSAGPTQRPSDNSHNEHAPASQGLKAEHLYGGGGSEPKSQ  
DKTHTCPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVWVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN  
STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDI  
AVEWESNGQPENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGHHHHH

Underlined amino acids sequence include a G4S linker and 6xHis epitope tag, respectively.

**Calculated Molecular weight (dimer):** 86317.94 Da

**Extinction coefficient:** 100900 (calculation performed as described by Pace *et al.* (1995), PMID: 8563639).

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