

## Recombinant Human LAIR1 Protein (aa 1-165, His Tag)

**Catalog Number:** PKSH030672

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

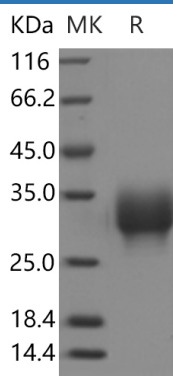
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human LAIR1 protein Met 1-Tyr165, with an C-terminal His
<b>Calculated MW</b>	17.2 kDa
<b>Accession</b>	AAF71275.2
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Leukocyte associated Ig-like receptor-1 (LAIR1) is a surface molecule expressed on human mononuclear leukocytes that functions as an inhibitory receptor on human NK cells. In addition to NK cells, LAIR1 is expressed on T cells, B cells, macrophages, and dendritic cells. It is predicted to mediate inhibitory functions based on the presence of immunoreceptor tyrosine-based inhibitory motifs (ITIMs) in its cytoplasmic domain. Cross-linking of LAIR1 on human T cell clones results in inhibition of cytotoxicity only in T cell clones that lack CD28 and are able to spontaneously lyse certain targets in vitro. Moreover, the cytolytic activity of freshly isolated T cells, which is thought to be mainly due to "effector" T cells, can be inhibited by anti-LAIR1 mAb. Thus, LAIR1 functions as an inhibitory receptor not only on NK cells, but also on human T cells. This indicates that LAIR1 provides a mechanism of regulation of effector T cells and may play a role in the inhibition of unwanted bystander responses mediated by Ag-specific T cells.

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