

## Recombinant Mouse LAIR1 Protein (aa 22-141, His Tag)

**Catalog Number:** PKSM041099

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

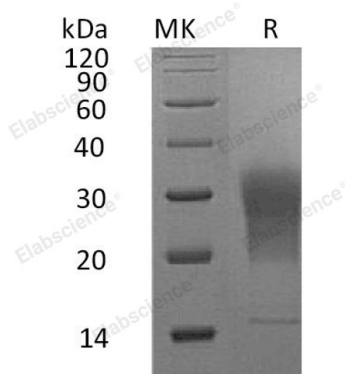
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse LAIR1 protein Gln22-Tyr141, with an C-terminal His
<b>Calculated MW</b>	14.4 kDa
<b>Observed MW</b>	20-35 kDa
<b>Accession</b>	Q8BG84
<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 a 0.2 µm filtered solution of 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 (LAIR-1) is an inhibitory receptor of the Ig superfamily that is structurally related to inhibitory members of KIR and ILT/CD85 families. It is expressed on immune cells, including NK cells, T cells, B cells, monocytes, immature neutrophils, dendritic cells and most thymocytes. The 253 amino acid (aa) type I transmembrane (TM) protein contains a 21 aa signal sequence, a 124 aa extracellular domain (ECD), a 20 aa TM domain and a 98 aa cytoplasmic domain. The ECD includes one C2-type Ig-like domain and two potential N-linked glycosylation sites. Tyrosine phosphorylation of two cytoplasmic ITIM motifs results in recruitment of phosphatases and down-regulation of signaling through activating receptors. LAIR1 shows high-affinity binding of collagens that results in inhibition of degranulation in a basophilic leukemia cell line.

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