

# Human LILRA4/CD85g Protein

Cat. No. LIL-HM4A4

## Description

<b>Source</b>	Recombinant Human LILRA4/CD85g Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Glu24-Asn446.
<b>Accession</b>	P59901
<b>Molecular Weight</b>	The protein has a predicted MW of 49.5 kDa. Due to glycosylation, the protein migrates to 60-75 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

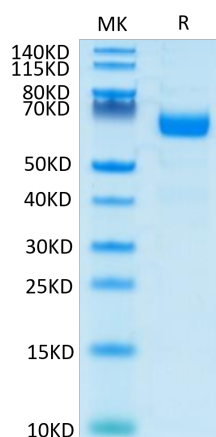
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

LILRA4, also known as ILT7 and CD85g, is an approximately 60-70 kDa variably glycosylated transmembrane protein that regulates immune cell activation. Mature human LILRA4 consists of a 423 amino acid (aa) extracellular domain (ECD) with four immunoglobulin-like domains, a 21 aa transmembrane segment, and a 32 aa cytoplasmic domain. LILRA4 function coreceptor to limit the innate immune responses to viral infections; signaling occurs via FCER1G (PubMed:16735691, PubMed:19564354). Down-regulates the production of IFNA1, IFNA2, IFNA4, IFNB1 and TNF by plasmacytoid dendritic cells that have been exposed to influenza virus or cytidine-phosphate-guanosine (CpG) dinucleotides, indicating it functions as negative regulator of TLR7 and TLR9 signaling cascades.

## Assay Data

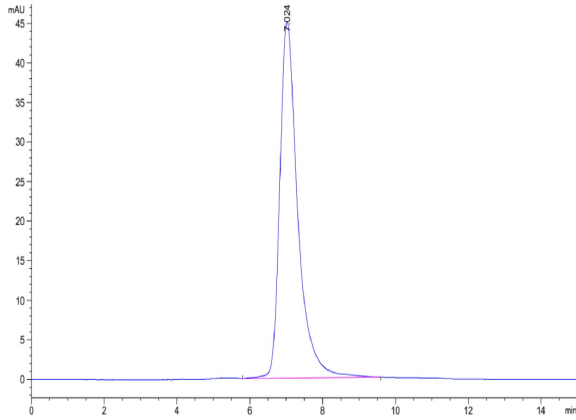
### Bis-Tris PAGE



Human LILRA4 on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human LILRA4 is greater than 95% as determined by SEC-HPLC.