# Biotinylated Human LILRB4 / CD85k / ILT3 Protein, His,Avitag™ (MALS verified)

Catalog # LI4-H82E4



### Synonym

LILRB4,ILT3,LIR5,CD85K,HM18

#### Source

Biotinylated Human LILRB4, His, Avitag(LI4-H82E4) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Glu 259 (Accession # AAH26309.1).

Predicted N-terminus: Gln 22

## **Molecular Characterization**

LILRB4(Gln 22 - Glu 259)
AAH26309.1
Poly-his Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 29.8 kDa. The protein migrates as 40-41 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

#### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method.

# **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### **Storage**

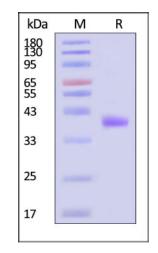
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

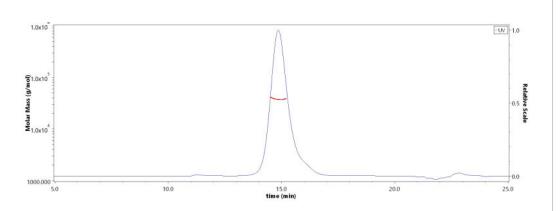
## **SDS-PAGE**



Biotinylated Human LILRB4, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# **Bioactivity-ELISA**

## **SEC-MALS**



The purity of Biotinylated Human LILRB4, His, Avitag (Cat. No. LI4-H82E4) is more than 90% and the molecular weight of this protein is around 30-40 kDa verified by SEC-MALS.

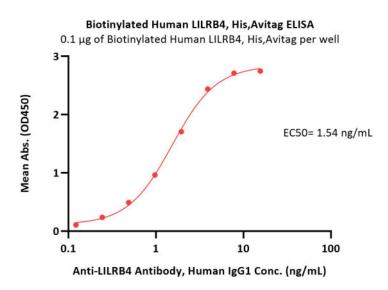
Report



# Biotinylated Human LILRB4 / CD85k / ILT3 Protein, His,Avitag™ (MALS verified)

Catalog # LI4-H82E4





Immobilized Biotinylated Human LILRB4, His,Avitag (Cat. No. LI4-H82E4) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Anti-LILRB4 Antibody, Human IgG1 with a linear range of 0.1-4  $\mu$ g/mL (QC tested).

## Background

Leukocyte immunoglobulin-like receptor subfamily B member 4 (LILRB4) is also known as CD85 antigen-like family member K (CD85K), Immunoglobulin-like transcript 3 (ILT-3), Leukocyte immunoglobulin-like receptor 5 (LIR-5), Monocyte inhibitory receptor HM18, which belongs to the leukocyte immunoglobulin-like receptor (LIR) family. LILRB4 / CD85K contains 2 Ig-like C2-type (immunoglobulin-like) domains. CD85K is detected in monocytes, macrophages, dendritic cells, lung, natural killer cells and B-cells. LILRB4 / CD85K is receptor for class I MHC antigens. CD85K recognizes a broad spectrum of HLA-A, HLA-B, HLA-C and HLA-G alleles, involved in the down-regulation of the immune response and the development of tolerance. LILRB4 interferes with TNFRSF5-signaling and NF-kappa-B up-regulation and inhibits receptor-mediated phosphorylation of cellular proteins and mobilization of intracellular calcium ions.

# **Clinical and Translational Updates**

