

#### Synonym

LILRB4,ILT3,LIR5,CD85K,HM18

#### Source

FITC-Labeled Human LILRB4, His Tag (LI4-HF2H3) 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

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 28.2 kDa. The protein migrates as 30-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

## Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular seive treatment during purification process.

### **FITC:Protein Ratio**

The FITC to protein molar ratio is 2-4.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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

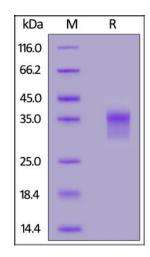
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and 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.

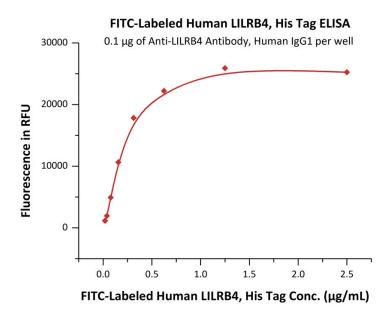
### **SDS-PAGE**



FITC-Labeled Human LILRB4, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.



### **Bioactivity-ELISA**



Immobilized Anti-LILRB4 Antibody, Human IgG1 at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind FITC-Labeled Human LILRB4, His Tag (Cat. No. <u>LI4-HF2H3</u>) with a linear range of 0.02-0.625  $\mu$ 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**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.