## Biotinylated Human LAG-3 / CD223 Protein, Mouse IgG2a Fc,Avitag™ (MALS verified)

Catalog # LA3-H82F3



### **Synonym**

LAG3,CD223,FDC

#### Source

Biotinylated Human LAG-3, Mouse IgG2a Fc, Avitag(LA3-H82F3) is expressed from human 293 cells (HEK293). It contains AA Leu 23 - Leu 450 (Accession # P18627-1).

Predicted N-terminus: Leu 23

### **Molecular Characterization**

LAG-3(Leu 23 - Leu 450) mFc(Glu 98 - Lys 330) P18627-1 P01863

This protein carries a mouse IgG2a Fc tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 75.4 kDa. The protein migrates as 100 kDa 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 µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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

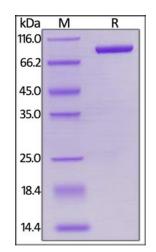
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

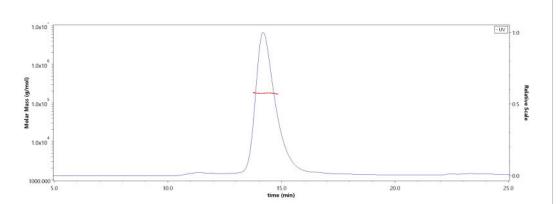
### **SDS-PAGE**



Biotinylated Human LAG-3, Mouse IgG2a Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

### **Bioactivity-ELISA**

### **SEC-MALS**



The purity of Biotinylated Human LAG-3, Mouse IgG2a Fc, Avitag (Cat. No. LA3-H82F3) is more than 90% and the molecular weight of this protein is around 170-200 kDa verified by SEC-MALS.

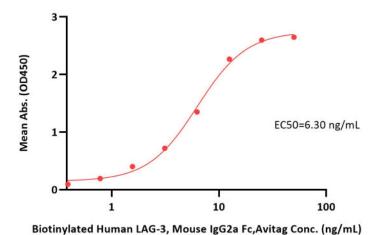
<u>Report</u>

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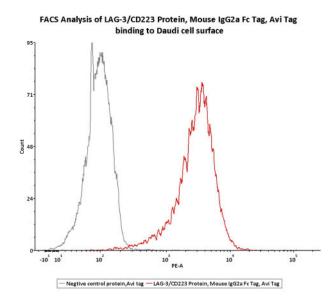


Biotinylated Human LAG-3, Mouse IgG2a Fc,Avitag ELISA 0.2μg of Madarex LAG-3 MAb, Human IgG1 per well



Immobilized Madarex LAG-3 MAb, Human IgG1 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human LAG-3, Mouse IgG2a Fc,Avitag (Cat. No. LA3-H82F3) with a linear range of 0.4-13 ng/mL (QC tested).

## **Bioactivity-FACS**



Flow Cytometry assay shows that Biotinylated Human LAG-3, Mouse IgG2a Fc,Avitag (Cat. No. LA3-H82F3) can bind to daudi cell surface. The concentration of LAG-3 used is  $0.3~\mu g/mL$  (Routinely tested).

### **Background**

Lymphocyte activation gene 3 protein (LAG3) is also known as CD antigen CD223 and protein FDC, which belongs to immunoglobulin (Ig) superfamily and contains 4 extracellular Ig-like domains. The LAG3 gene contains 8 exons. The sequence data, exon/intron organization, and chromosomal localization all indicate a close relationship of LAG3 to CD4. LAG3 /CD223 involved in lymphocyte activation. LAG3 /CD223 binds to HLA class-II antigens.

# **Clinical and Translational Updates**

