

**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) P18627-1	mFc(Glu 98 - Lys 330) P01863	Avi
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This protein carries a mouse IgG2a Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

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.

**Biotinylation**

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

**Biotin:Protein Ratio**

The biotin to protein ratio is *0.5-1* as determined by the HABA assay.

**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. 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**

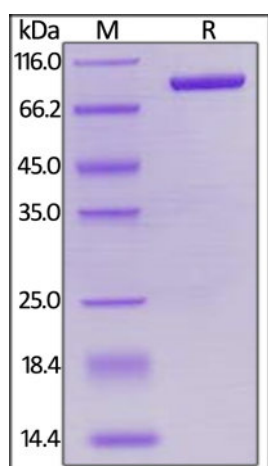
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

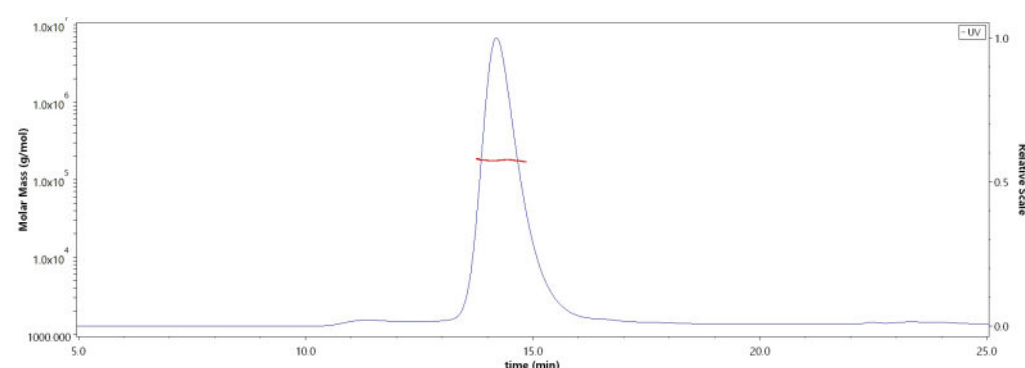
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



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

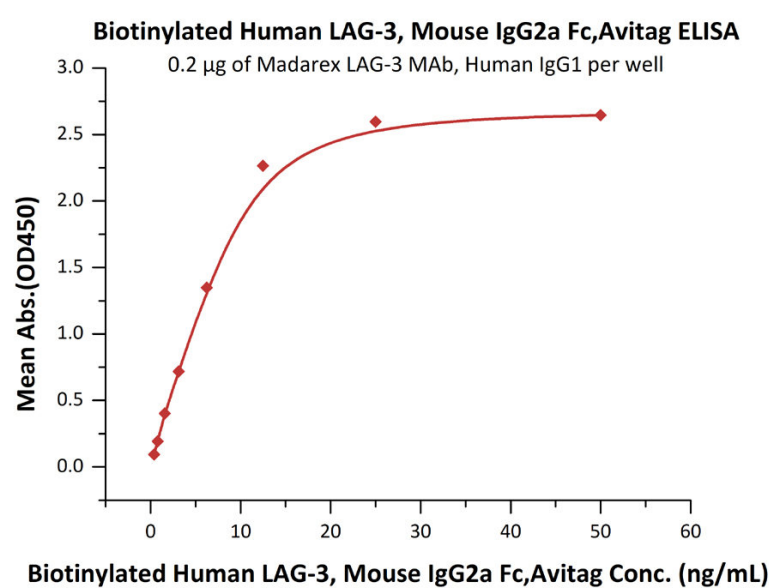
**SEC-MALS**



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

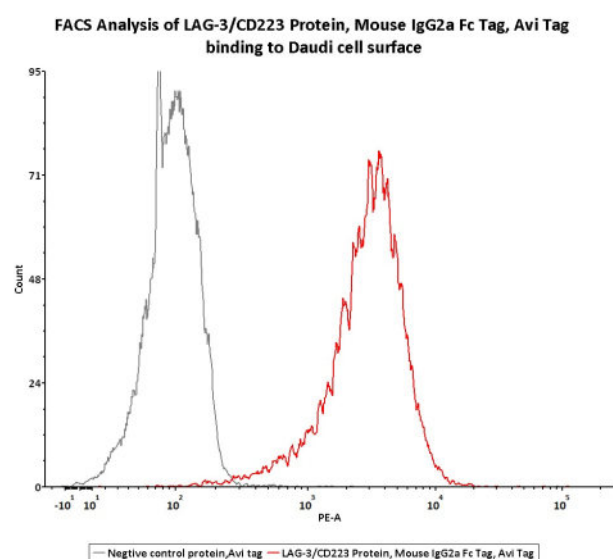
[Report](#)

**Bioactivity-ELISA**



Immobilized Madarex LAG-3 MAb, Human IgG1 at 2 µg/mL (100 µL/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 µg/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.

### References

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.