Biotinylated Mouse IgG2a Fc Protein, Avitag™ (MALS verified)

Catalog # IGA-M8210

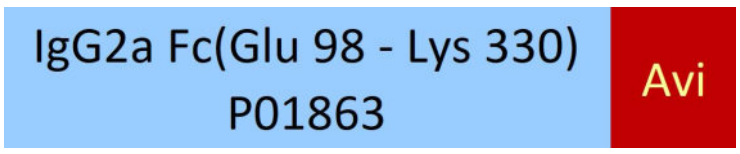
Synonym

IgG2A

Source

Biotinylated Mouse IgG2a Fc, Avitag(IGA-M8210) is expressed from human 293 cells (HEK293). It contains AA Glu 98 - Lys 330 (Accession # P01863).
Predicted N-terminus: Glu 98

Molecular Characterization



This protein carries an Avi tag (Avitag™) at the C-terminus.

The protein has a calculated MW of 28.2 kDa. The protein migrates as 32-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ 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

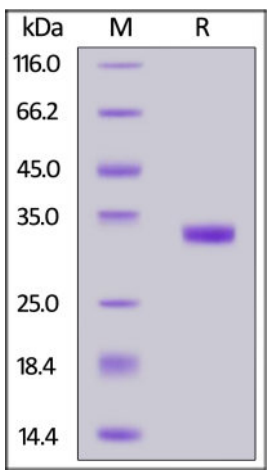
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

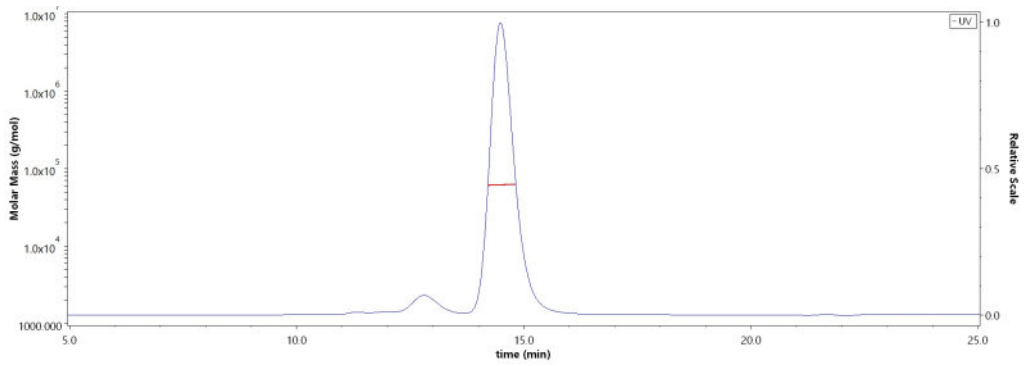
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



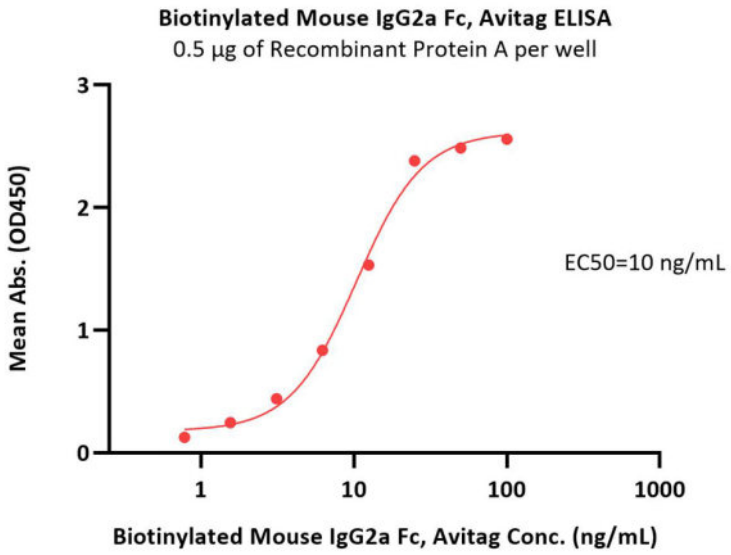
Biotinylated Mouse IgG2a Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



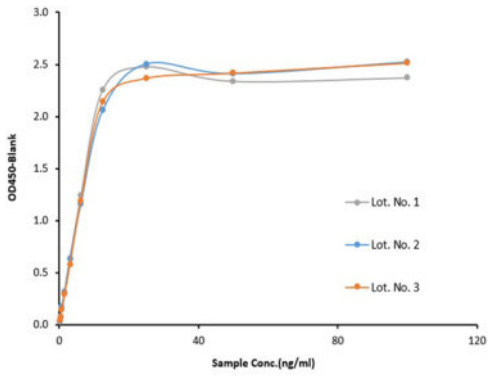
The purity of Biotinylated Mouse IgG2a Fc, Avitag (Cat. No. IGA-M8210) is more than 90% and the molecular weight of this protein is around 52-70 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

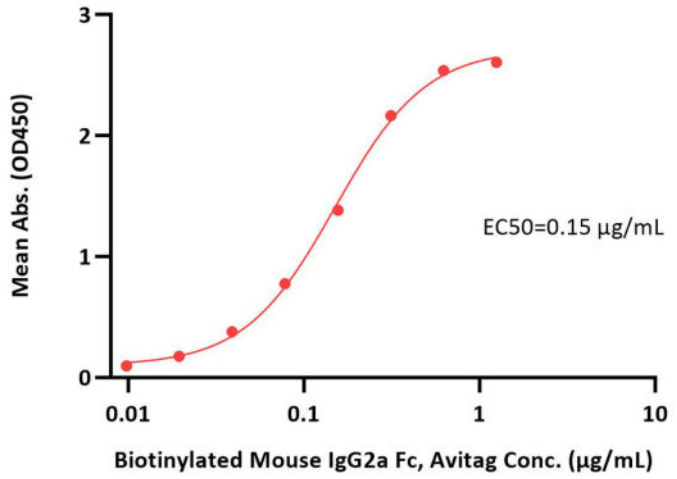


Immobilized Recombinant Protein A at 5 μg/mL (100 μL/well) can bind Biotinylated Mouse IgG2a Fc, Avitag (Cat. No. IGA-M8210) with a linear range of 0.8-13 ng/mL (QC tested).

Batch consistency



Lot. No.	EC50(μg/mL)
Lot. No. 1	0.0058
Lot. No. 2	0.0065
Lot. No. 3	0.0059



Immobilized Mouse CD16-2, His Tag (Cat. No. FC4-M52H3) at 5 μg/mL (100 μL/well) can bind Biotinylated Mouse IgG2a Fc, Avitag (Cat. No. IGA-M8210) with a linear range of 0.01-0.313 μg/mL (Routinely tested).

Background

Immunoglobulin G2 (IgG2) is a member of many immunoglobulin G developed and secreted by effective B cells. In wake of cutting by pepsin, IgG is divided into two F(ab)s with one antigen binding site and a high conserved Fc segment. The Fc segment bears a highly conserved N-glycosylation site. There are two members of IgG2: IgG2a and IgG2b. It was found that IgG2a was superior to IgG1 in activating complement. The glycosylation of the circulating immunoglobulin-γ (IgG) antibody molecules changes in rheumatoid arthritis.

Clinical and Translational Updates

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