

**Synonym**

IgG1

**Source**

Biotinylated Human IgG1 Fc, Avitag(IG1-H8213) is expressed from human 293 cells (HEK293). It contains AA Glu 99 - Lys 330 (Accession # [P01857-1](#) ).

Predicted N-terminus: Glu 99

**Molecular Characterization**

IgG1 Fc(Glu 99 - Lys 330)  
P01857-1

Avi

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

The protein has a calculated MW of 28.4 kDa. The protein migrates as 32-34 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**

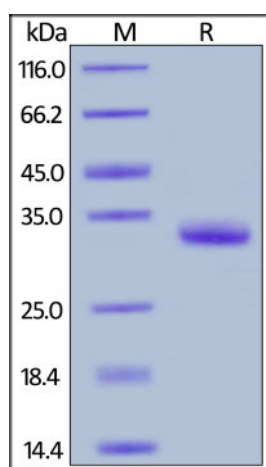
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

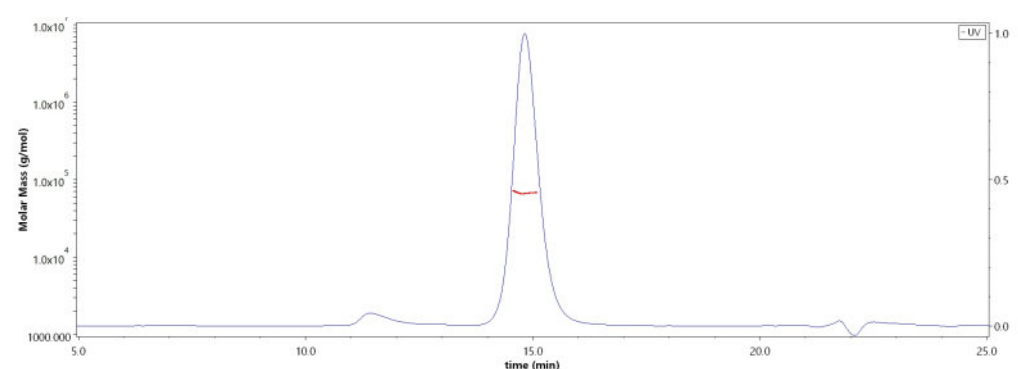
**SDS-PAGE**



Biotinylated Human IgG1 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%.

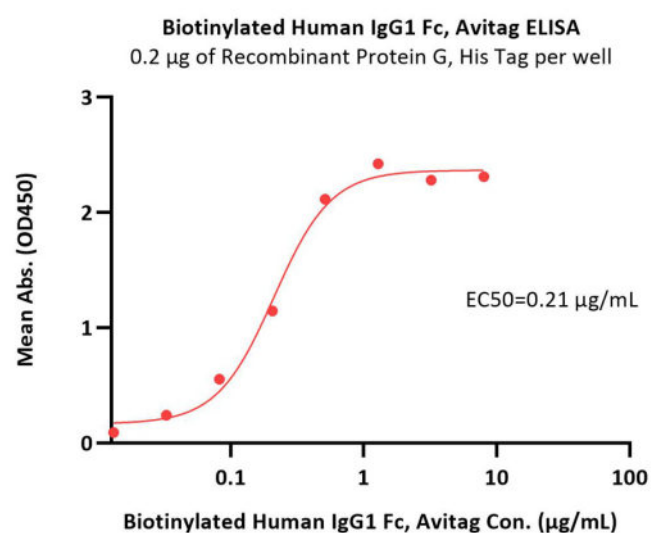
**Bioactivity-ELISA**

**SEC-MALS**



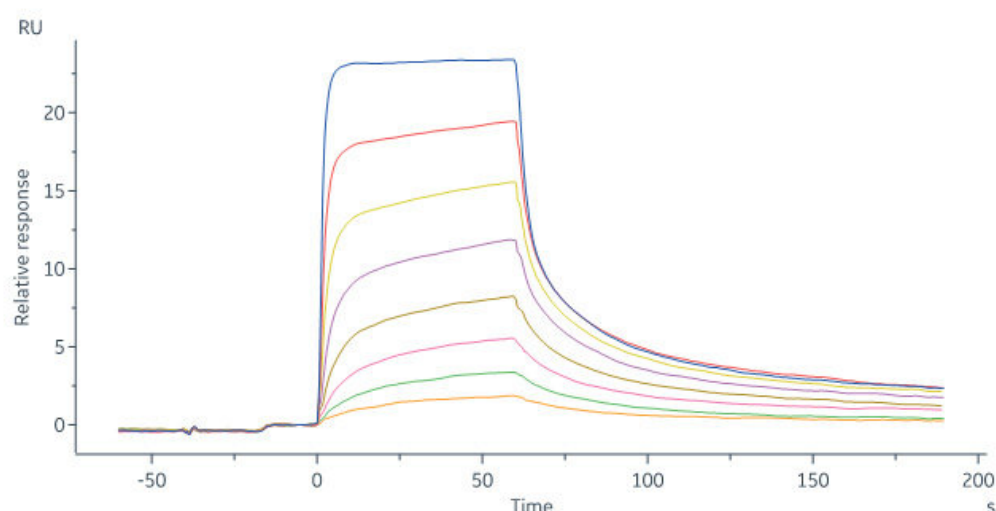
The purity of Biotinylated Human IgG1 Fc, Avitag (Cat. No. IG1-H8213) is more than 90% and the molecular weight of this protein is around 55-74 kDa verified by SEC-MALS.

[Report](#)



Immobilized Recombinant Protein G, His Tag (Cat. No. RPG-S3140) at 2 µg/mL (100 µL/well) can bind Biotinylated Human IgG1 Fc, Avitag (Cat. No. IG1-H8213) with a linear range of 0.013-0.512 µg/mL (Routinely tested).

### Bioactivity-SPR



Human FCGRT&B2M Heterodimer Protein, His Tag (SPR & BLI verified) (Cat. No. FCN-H52W7) captured on CM5 Chip via anti-His antibody can bind Biotinylated Human IgG1 Fc, Avitag (Cat. No. IG1-H8213) with an affinity constant of 0.377 µM as determined in SPR assay (Biacore 8K) (Routinely tested).

### Background

Crystallizable fragments composed of the carboxy-terminal halves of both IMMUNOGLOBULIN HEAVY CHAINS linked to each other by disulfide bonds. Fc fragments contain the carboxy-terminal parts of the heavy chain constant regions that are responsible for the effector functions of an immunoglobulin (COMPLEMENT fixation, binding to the cell membrane via FC RECEPTORS, and placental transport). IgG1 Fc was reported has a novel role as a potential anti-inflammatory drug for treatment of human autoimmune diseases.

### Clinical and Translational Updates

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