



## Synonym

IGHG2

## Source

Biotinylated Human IgG2 Fc Protein, Avitag(IG2-H8213) is expressed from human 293 cells (HEK293). It contains AA Glu 99 - Lys 326 (Accession # [P01859-1](#)).

Predicted N-terminus: Glu 99

## Molecular Characterization

IgG2 Fc(Glu 99 - Lys 326)  
P01859-1

Avi

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

The protein has a calculated MW of 27.9 kDa. The protein migrates as 33-35 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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.

>95% as determined by SEC-MALS.

## Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 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

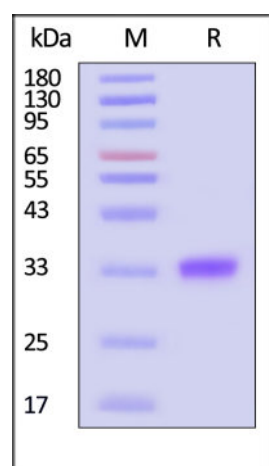
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

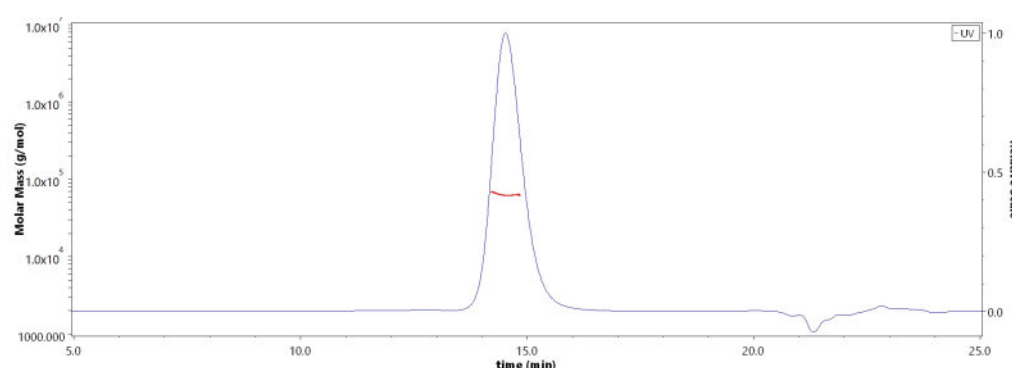
## SDS-PAGE



Biotinylated Human IgG2 Fc Protein, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

## Bioactivity-ELISA

## SEC-MALS

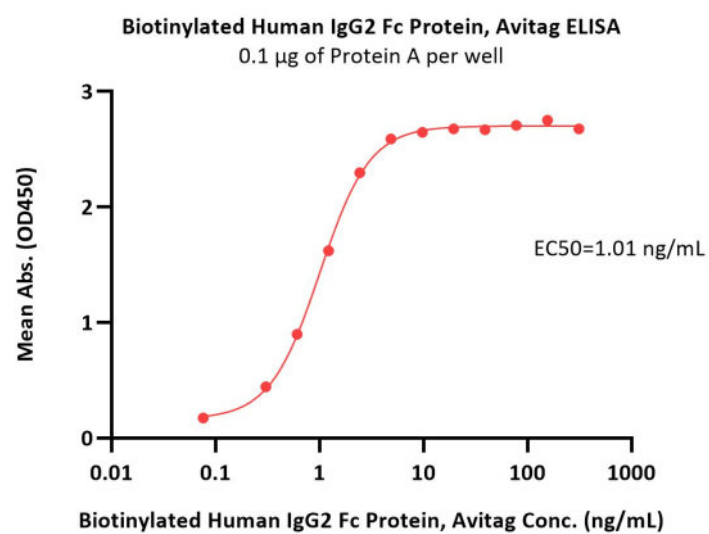


The purity of Biotinylated Human IgG2 Fc Protein, Avitag (Cat. No. IG2-H8213) is more than 95% and the molecular weight of this protein is around 50-70 kDa verified by SEC-MALS.

[Report](#)

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Immobilized Protein A at 1 µg/mL (100 µL/well) can bind Biotinylated Human IgG2 Fc Protein, Avitag (Cat. No. IG2-H8213) with a linear range of 0.08-2 ng/mL (QC 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. Ig gamma-2 chain Fc region contains two constant regions of IgG2 H chain (CH2, CH3).

## Clinical and Translational Updates

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