Biotinylated Human IgG2 Fc Protein, Avitag™ (MALS verified)

Catalog # IG2-H8213

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

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.

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

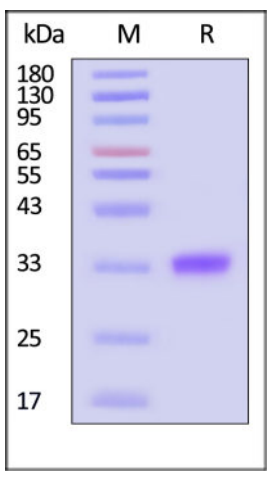
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

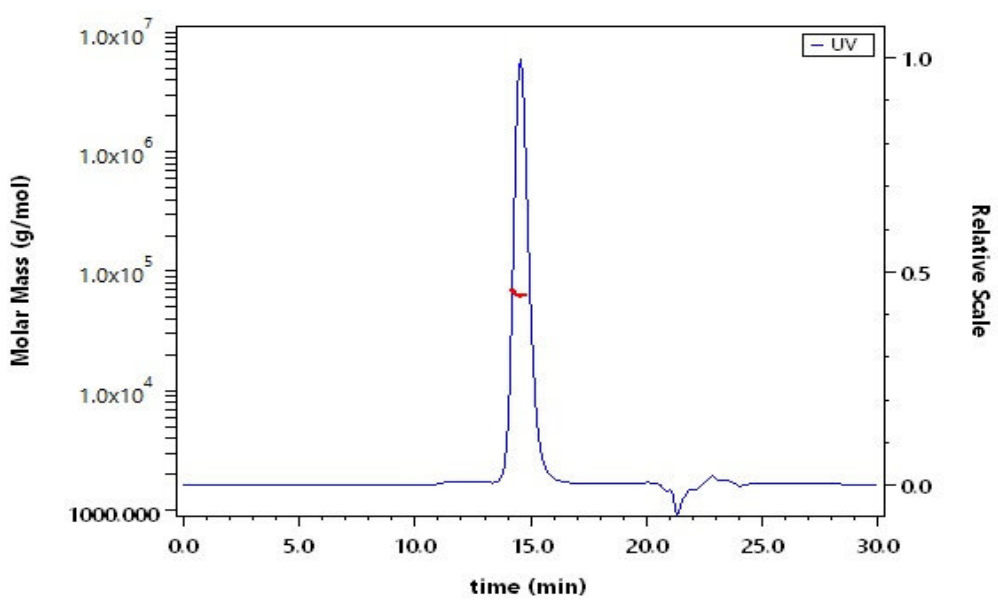
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



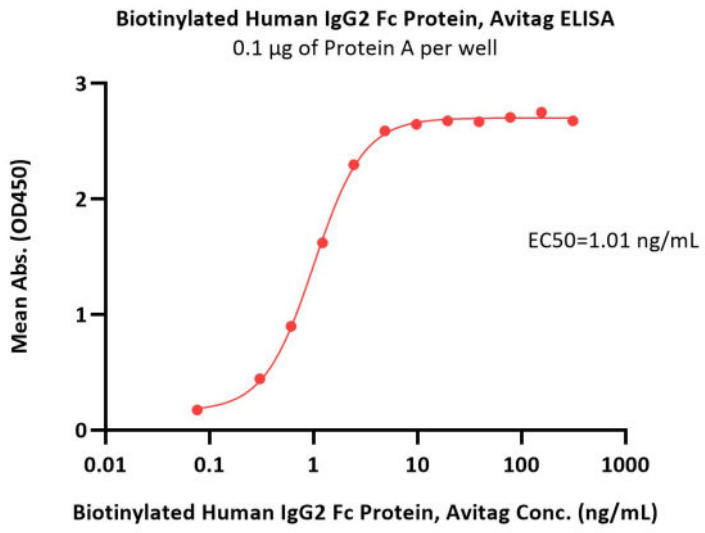
Biotinylated Human IgG2 Fc Protein, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

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

Bioactivity-ELISA



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).