



## Synonym

IgG1

## Source

Biotinylated Human IgG1 Fc (C103S), Avitag,His Tag(IG1-H82E9) is expressed from human 293 cells (HEK293). It contains AA Pro 100 - Lys 330 (Accession # [P01857-1](#) (C103S)).

Predicted N-terminus: Pro 100

## Molecular Characterization



This protein carries an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 28.8 kDa. The protein migrates as 36 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-HPLC.

## Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM 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

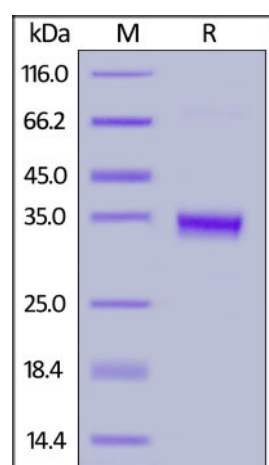
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

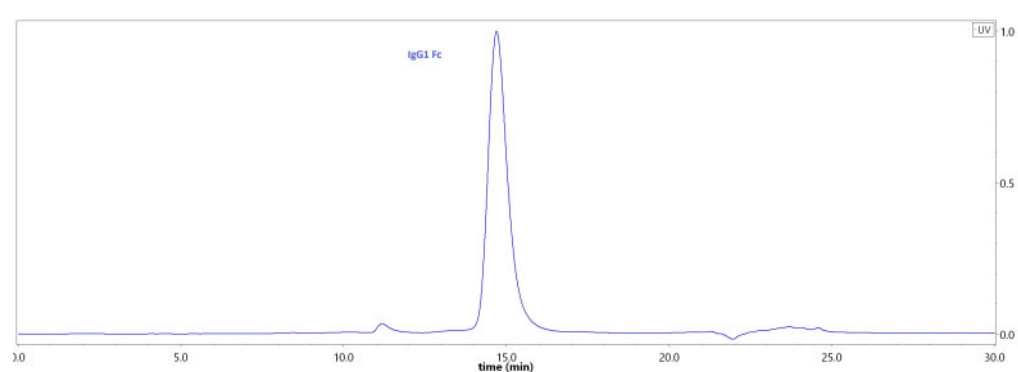
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE



Biotinylated Human IgG1 Fc (C103S), Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## SEC-HPLC

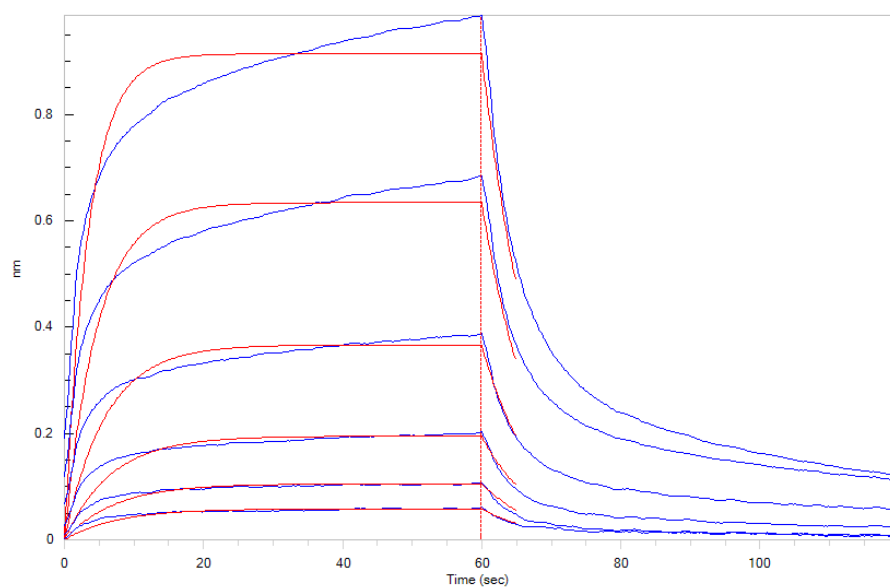


The purity of Biotinylated Human IgG1 Fc (C103S), Avitag,His Tag (Cat. No. IG1-H82E9) was greater than 90% as determined by SEC-HPLC.

## Bioactivity-BLI

Discounts, Gifts,  
and more!





Loaded Biotinylated Human IgG1 Fc (C103S), Avitag,His Tag (Cat. No.IG1-H82E9) on SA Biosensor can bind Human FCGRT&B2M Heterodimer Protein, His Tag (Cat. No.FCN-H52W7) with an affinity constant of  $1.9\mu\text{M}$  as determined in BLI assay (ForteBio Octet Red96e) (QC 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

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