



### Synonym

IgG1

### Source

FITC-Labeled Human IgG1 Fc Protein, His Tag(IG1-HF2H3) is expressed from human 293 cells (HEK293). It contains AA Glu 99 - Lys 330 (Accession # [P01857-1](#) (C103S, M135Y, S137T, T139E, H316K, N317F)).

Predicted N-terminus: Glu 99

### Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 28.1 kDa. The protein migrates as 33-37 kDa and 65-66 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

### Labeling

*The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.*

### Protein Ratio

The FITC to protein molar ratio is 1-3.

### Endotoxin

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

### Purity

>90% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22  $\mu\text{m}$  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  $-20^{\circ}\text{C}$  or lower.

*Please protect from light and avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  for 12 months in lyophilized state;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions after reconstitution.

### SDS-PAGE

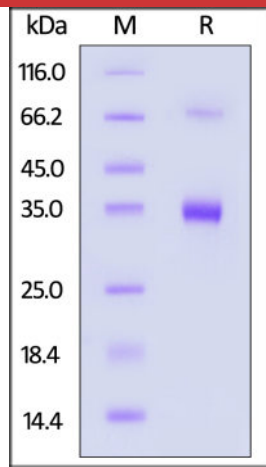
### SEC-MALS

Discounts, Gifts,  
and more!

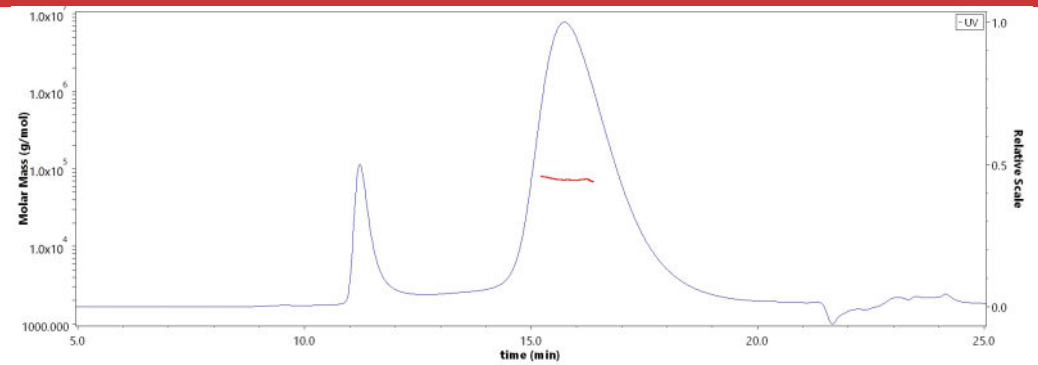


# FITC-Labeled Human IgG1 Fc (C103S, M135Y, S137T, T139E, H316K, N317F) Protein, His Tag (MALS verified)

Catalog # IG1-HF2H3



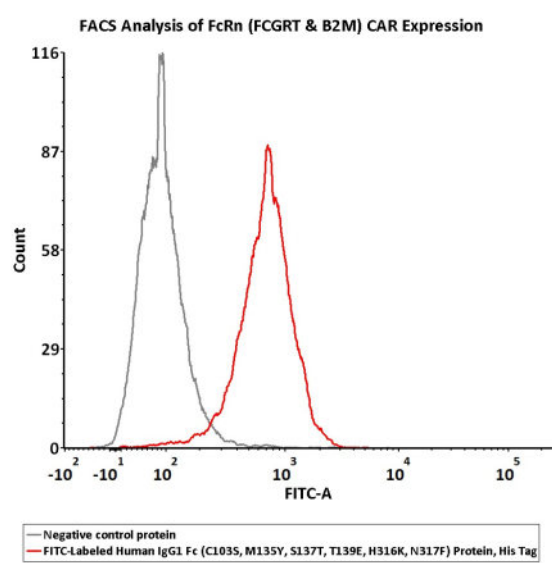
FITC-Labeled Human IgG1 Fc Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).



The purity of FITC-Labeled Human IgG1 Fc Protein, His Tag (Cat. No. IG1-HF2H3) is more than 85% and the molecular weight of this protein is around 65-80 kDa verified by SEC-MALS.

[Report](#)

## Bioactivity-FACS



2e5 of HEK293/Human FcRn (FCGRT & B2M) Stable Cell Line (Cat. No. CHEK-ATP079) were stained with 100  $\mu$ L of 10  $\mu$ g/mL of FITC-Labeled Human IgG1 Fc (C103S, M135Y, S137T, T139E, H316K, N317F) Protein, His Tag (Cat. No. IG1-HF2H3) and negative control protein respectively. FITC signal was used to evaluate the binding activity (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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