

# Human IgG1 Fc Protein

Cat. No. IGG-HM001

## Description

<b>Source</b>	Recombinant Human IgG1 Fc is expressed from HEK293 without tag. It contains Asp104-Lys330.
<b>Accession</b>	P01857-1
<b>Molecular Weight</b>	The protein has a predicted MW of 25.5 kDa. Due to glycosylation, the protein migrates to 31-33 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

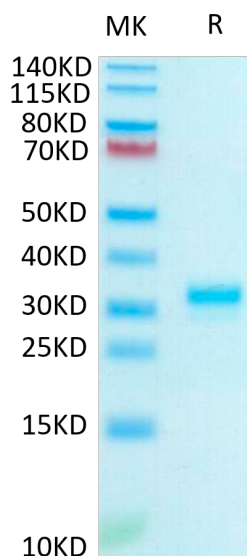
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

IgG1 is most abundant in serum among the four IgG subclasses (IgG1, 2, 3 and 4) and binds to Fc receptors (Fc $\gamma$ R) on phagocytic cells with high affinity. Fc fragment is demonstrated to mediate phagocytosis, trigger inflammation, and target Ig to particular tissues. IgG1 Fc was reported has a novel role as a potential anti-inflammatory drug for treatment of human autoimmune diseases.

## Assay Data

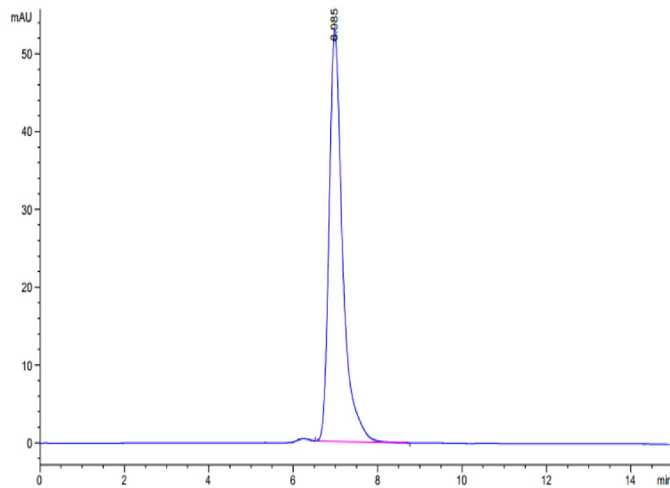
### Bis-Tris PAGE



Human IgG1 Fc on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

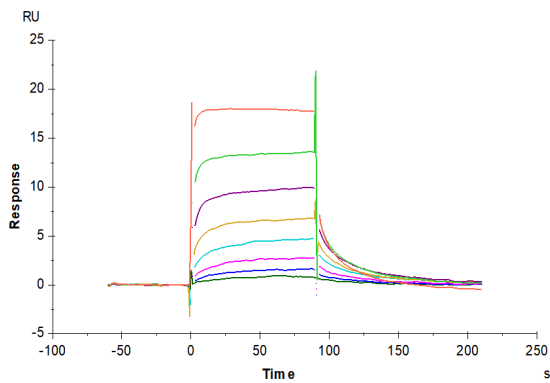
### SEC-HPLC

Assay Data



The purity of Human IgG1 Fc is greater than 95% as determined by SEC-HPLC.

SPR Data



Human FcRn, His Tag captured on CM5 Chip via anti-his antibody can bind Human IgG1 Fc, No Tag with an affinity constant of 0.28  $\mu$ M as determined in SPR assay (Biacore T200).