

Recombinant Human IGHG1 Protein, Myc-Avi-V5-FLAG-HA-His tagged

Cat. No. IGHG1-203H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human IgG1-Fc (Thr106-Lys330) protein with multiple tags (Myc-Avi-V5-FLAG-HA-His) at C-terminus is expressed in HEK293 cells.
Species	Human
Source	HEK293
Conjugation/Label	106-330 aa
Description	Fc fragments consist of the carboxy-terminal halves of both immunoglobulin heavy chains connected by disulfide bonds, forming the constant region responsible for antibody effector functions. These functions include complement fixation, binding to Fc receptors on immune cells (such as CD16, CD32, and CD64), and mediating placental transport of antibodies. The Fc region plays a critical role in immune defense by triggering processes like opsonization, antibody-dependent cellular cytotoxicity (ADCC), and inflammation. Additionally, proteins like Protein A and Protein G, found on certain bacteria, specifically bind to the Fc region and are widely used in biotechnology for antibody purification. Recombinant Fc fragments also have potential therapeutic applications as anti-inflammatory agents in autoimmune diseases.
Form	Liquid, 1×PBS with 0.09% NaN ₃ buffer, pH7.4, 0.22 µm filtered
Molecular Mass	This protein has a predicted molecular weight of 35.8 kDa. Under DTT-reducing

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	conditions, the protein migrates at approximately 40 kDa on SDS-PAGE. The smaller band below 30 kDa might correspond to the early translational termination product.
Purity	>85% based on SDS-PAGE under reducing condition
Applications	ELISA
Storage	Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4 centigrade for up to 2 weeks, or at -20 centigrade or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70 centigrade to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.
Concentration	25 µg size is bottled at 0.2 mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

GENE INFORMATION

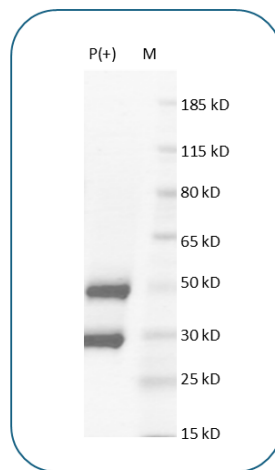
Gene Name	IGHG1 immunoglobulin heavy constant gamma 1 (G1m marker) [Homo sapiens (human)]
Official Symbol	IGHG1
Synonyms	IGHG1; immunoglobulin heavy constant gamma 1 (G1m marker);
Gene ID	3500
MIM	147100
UniProt ID	P01857

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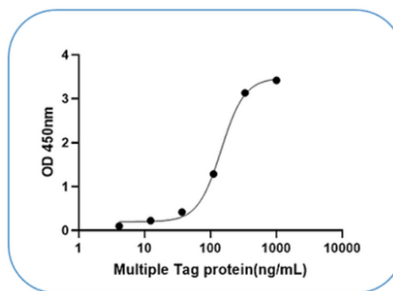
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SDS-PAGE



Human IgG1-Fc multi-tag protein final product on SDS-PAGE under reducing (P+) conditions. The purity of this protein appears to be greater than 85%. Smaller band below 30 kDa might correspond to the early translational termination product.

ELISA



Anti-FLAG (clone BR20M05) antibody is coated at 1 μ g/mL (100 ng/well). Anti-FLAG antibody can capture the multi-tag protein. HRP anti-His tag antibody (clone BR20M03) is used as the detection reagent. In the sandwich ELISA assay.

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