

Recombinant Human IGHG2 protein

Cat. No. IGHG2-548H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IGHG2 (Glu99-Lys326) protein carried no tag and was expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	Glu99-Lys326
Description	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).
Predicted N Terminal	Glu99
Form	Lyophilized from 0.22 μm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 25.7 kDa. The protein migrates as 33-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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Endotoxin	Less than 1.0 EU per µg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

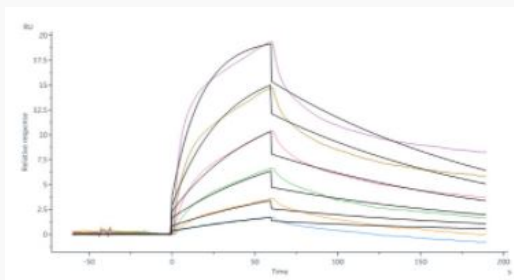
Gene Name	IGHG2
Official Symbol	IGHG2
Synonyms	IGHG2; Immunoglobulin heavy constant gamma 2(G2m marker)
Gene ID	3501
MIM	147110
UniProt ID	P01859

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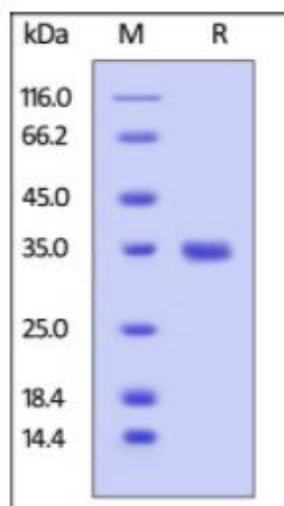
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Bioactivity-SPR of IGHG2-548H



Human FCGRT&B2M Heterodimer Protein, His Tag (SPR & BLI verified) captured on CM5 Chip via anti-His antibody can bind Human IgG2 Fc, Tag Free (SPR verified) with an affinity constant of 33.3 nM as determined in SPR assay (Biacore 8K) (QC tested).

SDS-PAGE of IGHG2- 548H



Human IgG Fc, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.