Human IgG2 Fc Protein, Tag Free (MALS & SPR verified)

Catalog # IG2-H5206

Synonym

IGHG2

Source

Human IgG2 Fc, Tag Free(IG2-H5206) is expressed from human 293 cells (HEK293). It contains AA Glu 99 - Lys 326 (Accession # P01859-1).
Predicted N-terminus: Glu 99

Molecular Characterization

IgG2 Fc(Glu 99 - Lys 326)
P01859-1

This protein carries no "tag".

The protein has a calculated MW of 25.7 kDa. The protein migrates as 30-33 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm 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

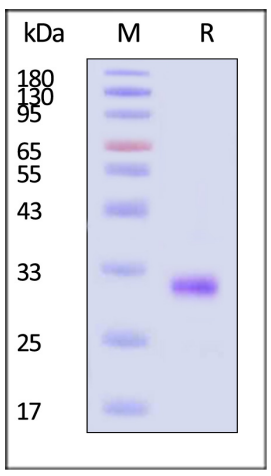
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

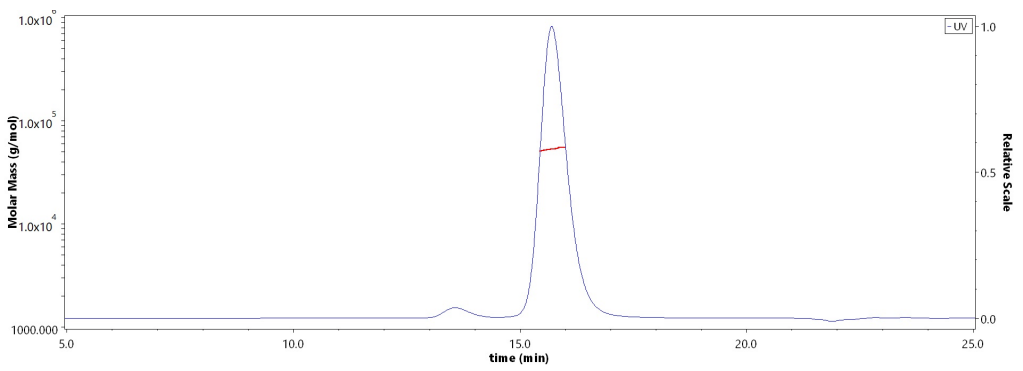
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



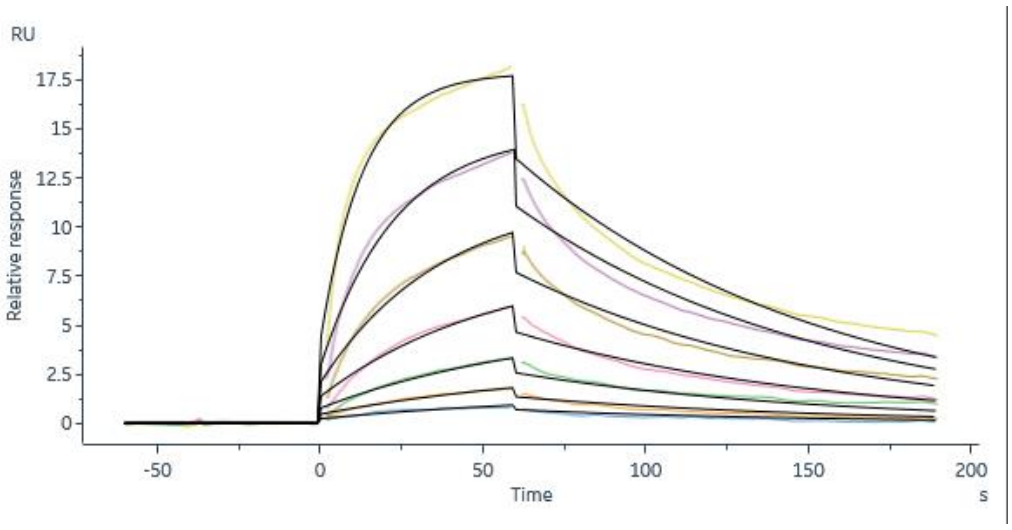
Human IgG2 Fc, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human IgG2 Fc, Tag Free (Cat. No. IG2-H5206) is more than 90% and the molecular weight of this protein is around 44-66 kDa verified by SEC-MALS.
Report

Bioactivity-SPR



Human FCGRT&B2M Heterodimer Protein, His Tag (Cat. No. FCN-H52W7) captured on CM5 Chip via anti-His antibody can bind Human IgG2 Fc, Tag Free (Cat. No. IG2-H5206) with an affinity constant of 41.9 nM as determined in SPR assay (Biacore 8K) (QC tested).

Background

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).