

Mouse IgG2a Fc Protein, Tag Free (MALS verified)

Catalog # IGA-M5207



BIOSYSTEMS
Acro

Synonym

IgG2A

Source

Mouse IgG2a Fc, Tag Free (IGA-M5207) is expressed from human 293 cells (HEK293). It contains AA Glu 98 - Lys 330 (Accession # [CAC20702](#)).

Predicted N-terminus: Glu 98

Molecular Characterization

IgG2a Fc(Glu 98 - Lys 330)
CAC20702

This protein carries no "tag".

The protein has a calculated MW of 26.4 kDa. The protein migrates as 30-35 kDa under reducing (R) condition, and 55-60 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

Endotoxin

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

Purity

>90% as determined by SDS-PAGE.

>95% 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.

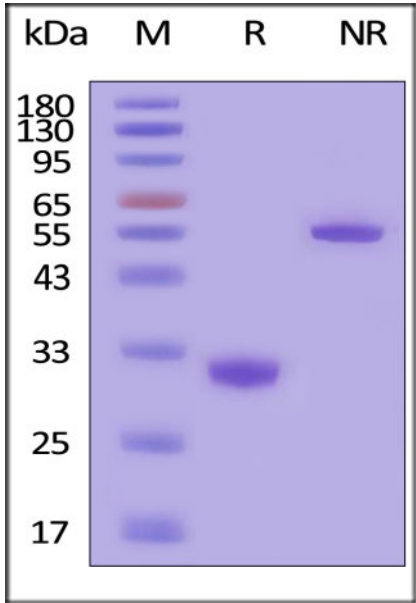
This product is stable after storage at:

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

ACRO Quality Management System

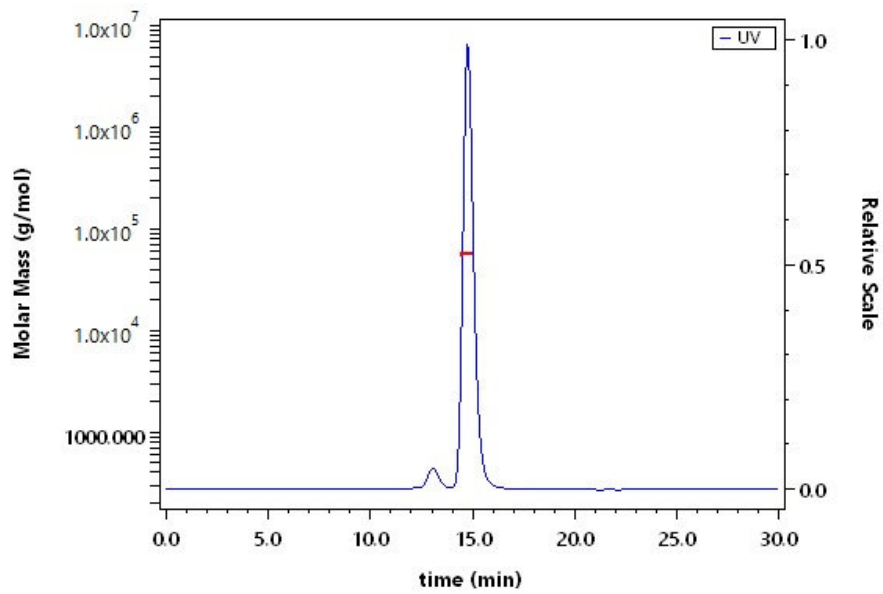
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



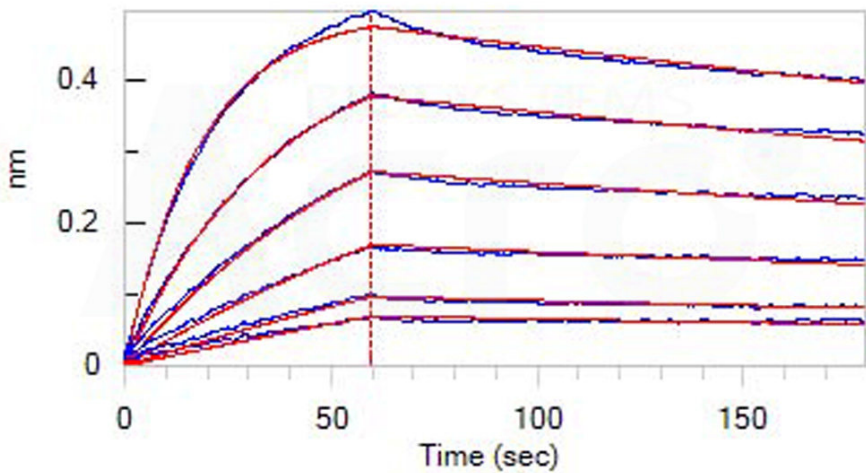
Mouse IgG2a Fc, Tag Free on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS

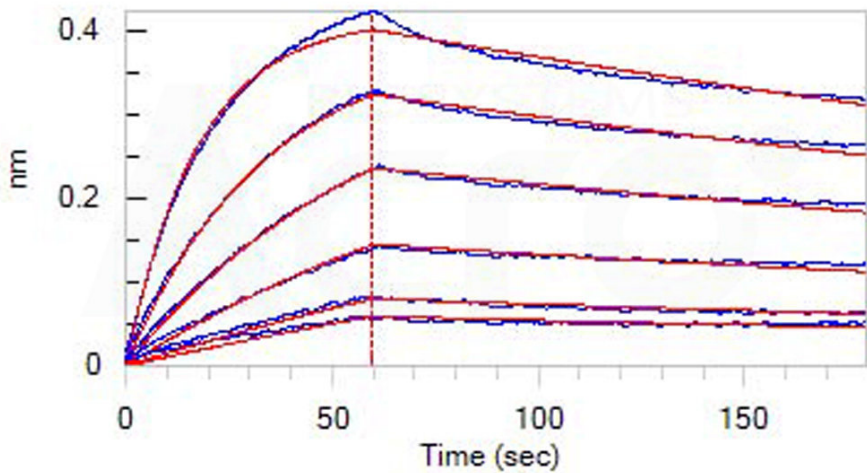


The purity of Mouse IgG2a Fc, Tag Free (Cat. No. IGA-M5207) is more than 95% and the molecular weight of this protein is around 48-64 kDa verified by SEC-MALS.

Bioactivity-BLI



Loaded Mouse FCGRT&B2M Heterodimer Protein, His Tag (BLI verified) (Cat. No. FCM-M52W8) on NTA Biosensor, can bind Mouse IgG2a Fc, Tag Free(Cat. No. IGA-M5207) with an affinity constant of 5.75 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Mouse FCGRT&B2M Heterodimer Protein, His Tag&Twin-Strep Tag (BLI verified) (Cat. No. FCM-M52W2) on NTA Biosensor, can bind Mouse IgG2a Fc, Tag Free(Cat. No. IGA-M5207) with an affinity constant of 7.73 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely 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.



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