Mouse Fc gamma RIV / CD16-2 Protein, His Tag (MALS verified)

Catalog # FC4-M52H3

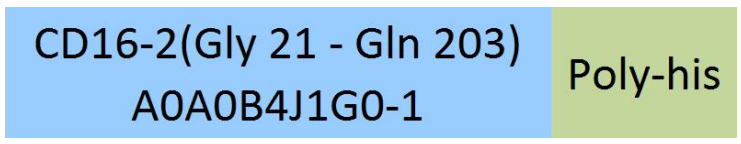
Synonym

Fc gamma RIV,CD16-2,Fcgr4

Source

Mouse CD16-2, His Tag(FC4-M52H3) is expressed from human 293 cells (HEK293). It contains AA Gly 21 - Gln 203 (Accession # A0A0B4J1G0-1). Predicted N-terminus: Gly 21

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 22.8 kDa. The protein migrates as 30-38 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

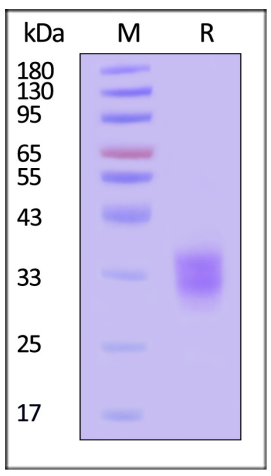
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

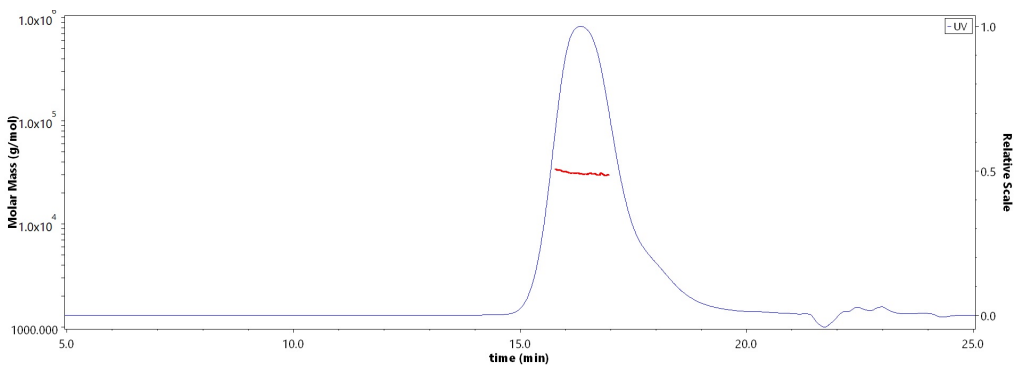
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

SDS-PAGE



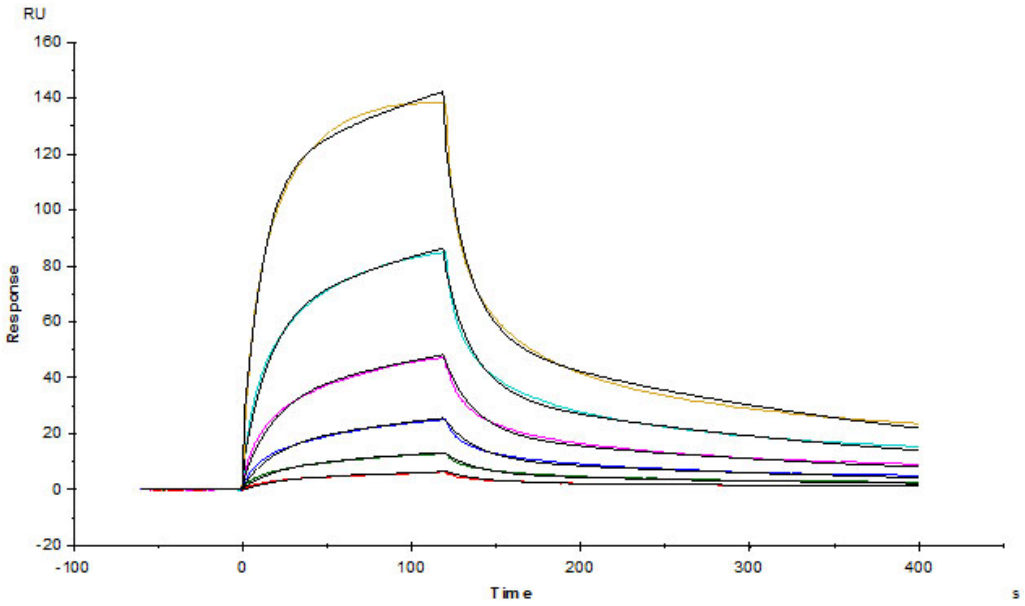
Mouse CD16-2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



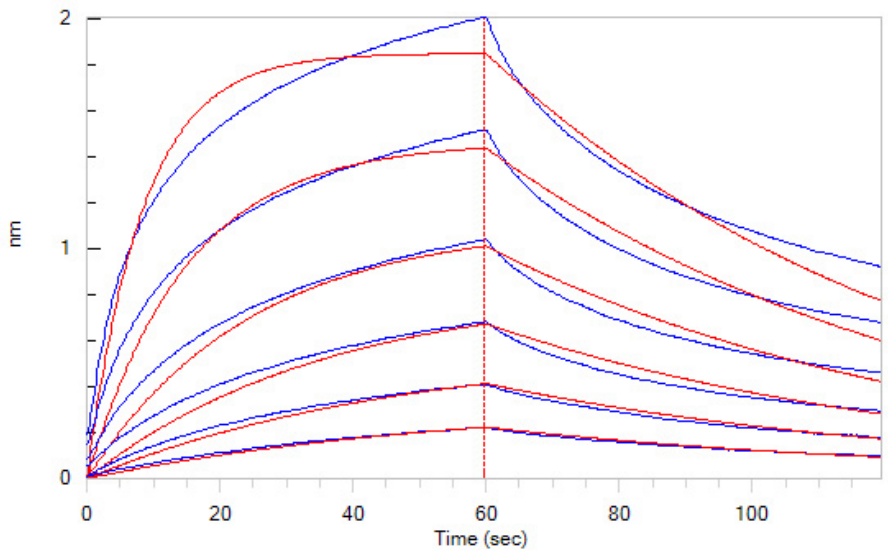
The purity of Mouse CD16-2, His Tag (Cat. No. FC4-M52H3) is more than 90% and the molecular weight of this protein is around 25-35 kDa verified by SEC-MALS.
Report

Bioactivity-SPR

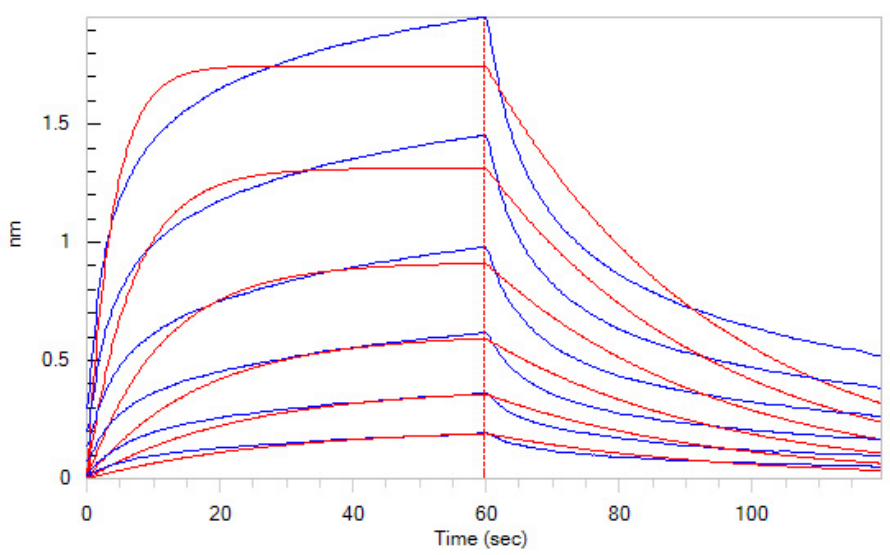


Captured Mouse CD16-2, His Tag (Cat. No. FC4-M52H3) on NTA-Series S sensor chip can bind OKT3 with an affinity constant of 154 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Bioactivity-BLI



Loaded Mouse CD16-2, His Tag (Cat. No. FC4-M52H3) on NTA Biosensor, can bind OKT3 with an affinity constant of 140 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Mouse CD16-2, His Tag (Cat. No. FC4-M52H3) on NTA Biosensor, can bind Herceptin with an affinity constant of 122 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

FcgR4(Low affinity immunoglobulin gamma Fc region receptor IV) is also known as CD16-2, FcgammaRIV, receptor for the Fc region of immunoglobulin gamma . Also acts as a receptor for the Fc region of immunoglobulin epsilon . Binds with intermediate affinity to both IgG2a and IgG2b . Does not display binding to IgG1 or IgG3. Plays a role in promoting bone resorption by enhancing osteoclast differentiation following binding to IgG2a. Binds with low affinity to both the a and b allotypes of IgE. Has also been shown to bind to IgE allotype a only but not to allotype b. Binding to IgE promotes macrophage-mediated phagocytosis, antigen presentation to T cells, production of proinflammatory cytokines and the late phase of cutaneous allergic reactions