Biotinylated Human Fc gamma RIIA/CD32a (H167) Protein

Cat. No. CDA-HM432B

KACTUS

Description

Source	Recombinant Biotinylated Human Fc gamma RIIA/CD32a (H167) Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus.
	It contains Ala36-Ile218(H167).
Accession	P12318-1
Molecular Weight	The protein has a predicted MW of 23.2 kDa. Due to glycosylation, the protein migrates to 30-40 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

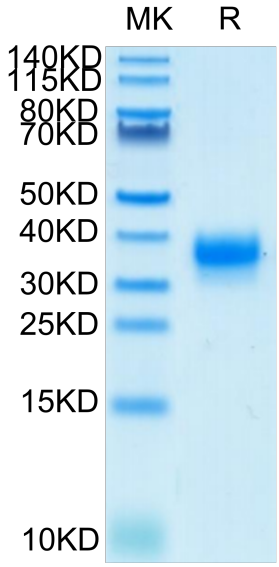
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The Fc gamma Rs have been divided into three classes based on close relationships in their extracellular domains; these groups are designated Fc gamma RI (also known as CD64), Fc gamma RII (CD32), and Fc gamma RIII (CD16). Each group may be encoded by multiple genes and exist in different isoforms depending on species and cell type. The CD64 proteins are high affinity receptors (~10e-8-10e-9 M) capable of binding monomeric IgG, whereas the CD16 and CD32 proteins bind IgG with lower affinities (~10e-6-10e-7 M) only recognizing IgG aggregates surrounding multivalent antigens.

Assay Data

Bis-Tris PAGE



Human Fc gamma RIIA (H167) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

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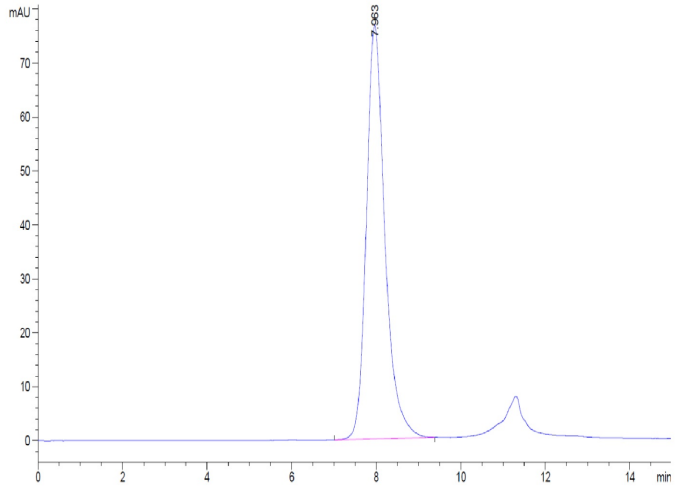
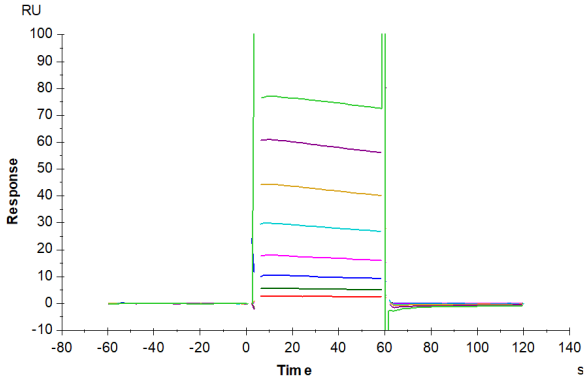
Assay Data



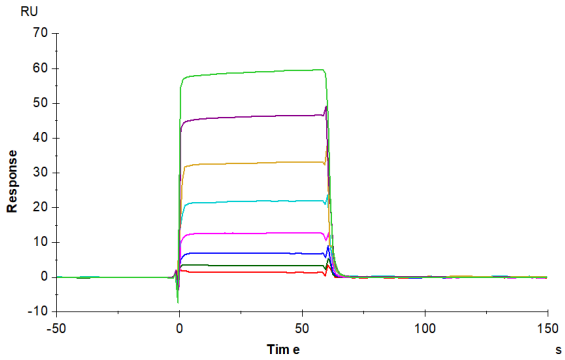
The purity of Human Fc gamma RIIA (H167) is greater than 95% as determined by SEC-HPLC.

SPR Data



Biotinylated Human Fc gamma RIIA (H167) , His-Avi Tag captured on CM5 Chip via Anti-his antibody can bind Rituximab with an affinity constant of 1.44 μM as determined in SPR assay (Biacore T200) (QC Test).

SPR Data



Rituximab captured on CM5 Chip via Protein A can bind Biotinylated Human Fc gamma RIIA (H167) , His-Avi Tag with an affinity constant of 0.680 μM as determined in SPR assay (Biacore T200).