

Mouse Fc gamma RI/CD64 Protein

Cat. No. FRI-MM164

Description

Source	Recombinant Mouse Fc gamma RI/CD64 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Glu25-Pro297.
Accession	P26151-1
Molecular Weight	The protein has a predicted MW of 31.5 kDa. Due to glycosylation, the protein migrates to 50-60 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per ug by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

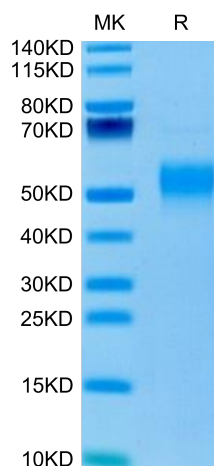
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days 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 ($\sim 10^{-8}$ - 10^{-9} M) capable of binding monomeric IgG, whereas the CD16 and CD32 proteins bind IgG with lower affinities ($\sim 10^{-6}$ - 10^{-7} M) only recognizing IgG aggregates surrounding multivalent antigens.

Assay Data

Tris-Bis PAGE



Mouse Fc gamma RI on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

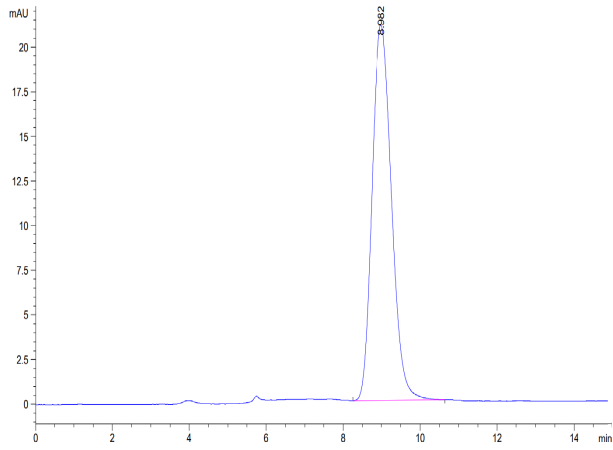
SEC-HPLC

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Assay Data



The purity of Mouse Fc gamma RI is greater than 95% as determined by SEC-HPLC.

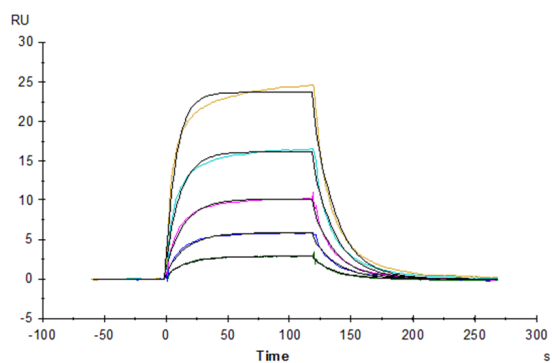
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Assay Data

SPR Data



Trastuzumab captured on CM5 Chip via Protein A can bind Mouse Fc gamma RI, His Tag with an affinity constant of 87.0 nM as determined in SPR assay (Biacore T200).