

# Human Fc gamma RIIIB/CD16b (NA2) Protein

Cat. No. FCR-HM42B

## Description

<b>Source</b>	Recombinant Human Fc gamma RIIIB/CD16b (NA2) Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Gly17-Ser200(NA2). The CD16b NA1 differ with the CD16b NA2 in AA36, 65, 82, and 106. The CD16b NA1 form carries R36, N65, D82, and V106, while the CD16b NA2 form carries S36, S65, N82, and I106.
<b>Accession</b>	O75015-1
<b>Molecular Weight</b>	The protein has a predicted MW of 23.7 kDa. Due to glycosylation, the protein migrates to 47-53 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

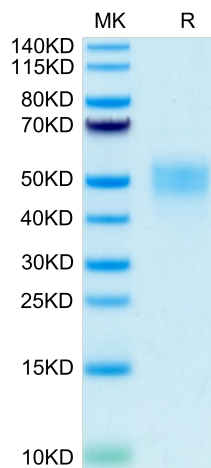
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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

Human Fc gamma RIIIB/CD16b Protein is a receptor for the Fc region of immunoglobulins gamma. Low affinity receptor. Binds complexed or aggregated IgG and also monomeric IgG. Contrary to III-A, is not capable to mediate antibody-dependent cytotoxicity and phagocytosis. May serve as a trap for immune complexes in the peripheral circulation which does not activate neutrophils.

## Assay Data

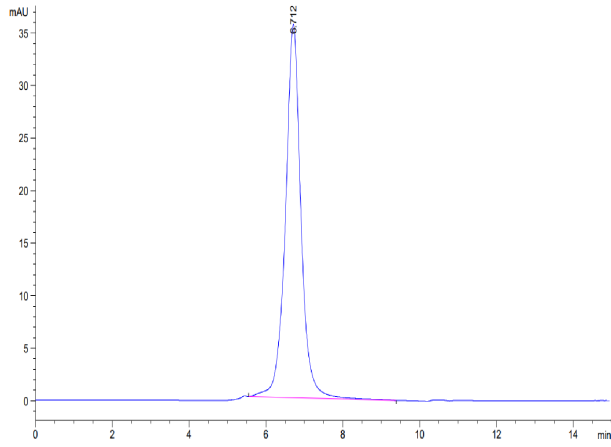
### Tris-Bis PAGE



Human Fc gamma RIIIB (NA2) on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

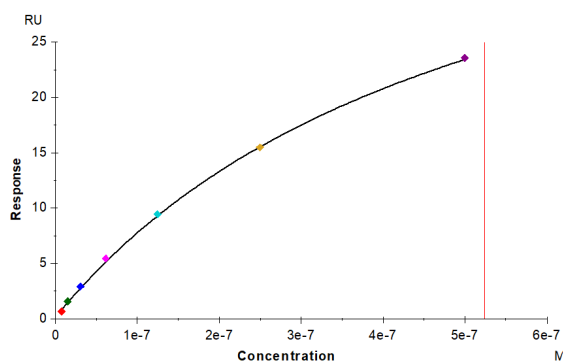
Assay Data



The purity of Human Fc gamma RIIIB (NA2) is greater than 95% as determined by SEC-HPLC.

Assay Data

SPR Data



Human Fc gamma RIIIB (NA2) , His Tag captured on CM5 Chip via anti-his antibody can bind Rituximab with an affinity constant of 0.52  $\mu$ M as determined in SPR assay (Biacore T200).