# Human Fc gamma RIIB/C (CD32b/c) Protein, SUMO, His Tag (MALS & BLI verified)

Catalog # CDB-H5298



## **Synonym**

FCGR2B,C,CD32b,c,FcRII-b,c,Fc-gamma RII-b,c,Fc-gamma-RIIb,c,CD32,FCG2,IGFR2,CDw32

#### Source

Human CD32b/c, SUMO,His Tag (CDB-H5298) is expressed from human 293 cells (HEK293). It contains AA Ala 46 - Pro 217 (Accession # P31994-1). In the region Ala 46 - Pro 217, the AA sequence of Fc gamma RIIB and Fc gamma RIIC are homologus.

Predicted N-terminus: Gly

### **Molecular Characterization**

SUMO CD32b/c(Ala 46 - Pro 217) Poly-his

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

The protein has a calculated MW of 32.0 kDa. The protein migrates as 40-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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

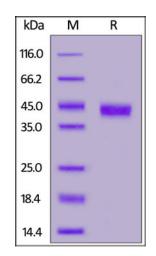
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

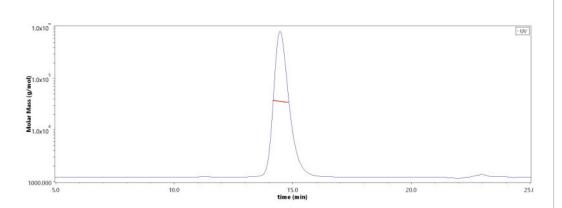
# SDS-PAGE



Human CD32b/c, SUMO, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-BLI**

### **SEC-MALS**



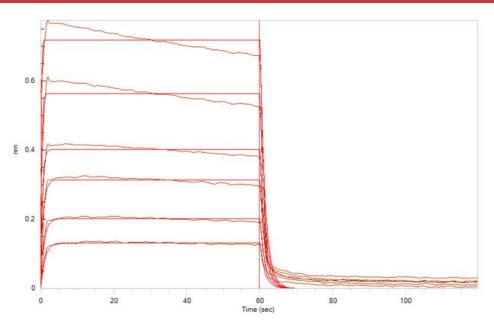
The purity of Human CD32b/c, SUMO, His Tag (Cat. No. CDB-H5298) is more than 90% and the molecular weight of this protein is around 30-40 kDa verified by SEC-MALS.

Report

# Human Fc gamma RIIB/C (CD32b/c) Protein, SUMO, His Tag (MALS & BLI verified)







Loaded Human CD32b/c, SUMO,His Tag (Cat. No. CDB-H5298) on HIS1K Biosensor, can bind Rituximab with an affinity constant of 2.3  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

## Background

Receptors for the Fc region of IgG (Fc  $\gamma$  R) are members of the Ig superfamily that function in the activation or inhibition of immune responses. Three classes of human Fc  $\gamma$  Rs: RI (CD64), RII (CD32), and RIII (CD16), which generate multiple isoforms, are recognized.

There are three genes for human Fc $\gamma$  RII /CD32 (A, B, and C) and one for mouse Fc $\gamma$  RII B (CD32B). CD32 is a low affinity receptor for IgG. Low affinity immunoglobulin gamma Fc region receptor II-b (FCGR2B) is also known as CD32b, FCG2, IGFR2. CD32B is expressed on B cells and myeloid dendritic cells. Ligation of CD32B on B cells downregulates antibody production and may, in some circumstances, promote apoptosis. Co-ligation of CD32B on dendritic cells inhibits maturation and blocks cell activation. CD32B may also be a target for monoclonal antibody therapy for malignancies.

# **Clinical and Translational Updates**

