Catalog # CDB-H5284



#### 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 Protein, Strep Tag(CDB-H5284) is expressed from human 293 cells (HEK293). It contains AA Ala 46 - Pro 217 (Accession # <u>P31994-1</u>). Predicted N-terminus: Ala 46

# **Molecular Characterization**

CD32b/c(Ala 46 - Pro 217) P31994-1 Twin-Strep

This protein carries a twin strep tag at the C-terminus.

The protein has a calculated MW of 22.7 kDa. The protein migrates as 30-34 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

# Purity

>95% as determined by SDS-PAGE.

>95% 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

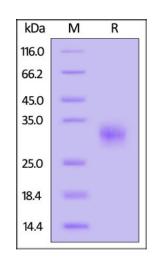
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

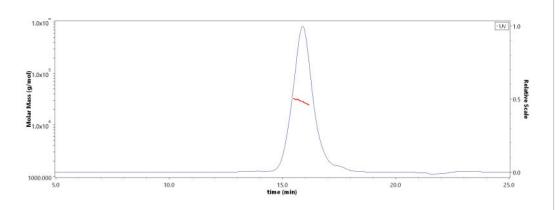
- -20°C to -70°C for 12 months in lyophilized state;
- $70^{\circ}$ C for 3 months under sterile conditions after reconstitution.

# SDS-PAGE



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

# SEC-MALS



The purity of Human CD32b/c Protein, Strep Tag (Cat. No. CDB-H5284) is more than 95% and the molecular weight of this protein is around 26-38 kDa verified by SEC-MALS.



**Bioactivity-SPR** 

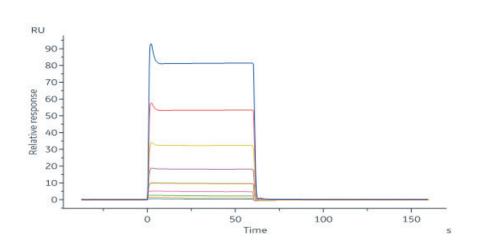
>>> www.acrobiosystems.com



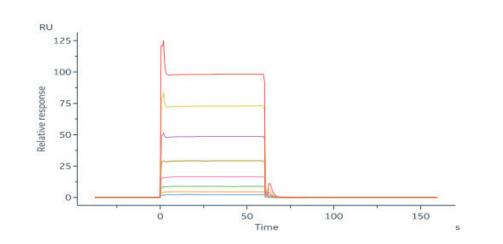


# Human Fc gamma RIIB/C (CD32b/c) Protein, Strep Tag (MALS & SPR verified)

Catalog # CDB-H5284



Human CD32b/c Protein, Strep Tag (Cat. No. CDB-H5284) immobilized on CM5 Chip can bind Rituximab with an affinity constant of 10.2  $\mu$ M as determined in a SPR assay (Biacore 8K) (QC tested).



Rituximab immobilized on CM5 Chip can bind Human CD32b/c Protein, Strep Tag (Cat. No. CDB-H5284) with an affinity constant of  $5.18 \mu$ M as determined in a SPR assay (Biacore 8K) (Routinely 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 Fcy RII /CD32 (A, B, and C) and one for mouse Fcy 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**





>>> www.acrobiosystems.com

