

Recombinant Human FCGR2B Protein, His&Avi tagged, Biotin Labeled

Cat. No. FCGR2B-165H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant CD32b/c /Fc gamma RIIfb (Ala46-Pro217) with C-terminus Avi-His-tag is expressed in CHO cell. This protein was site-specifically labeled with Biotin by BirA ligase.
Species	Human
Source	CHO
ProteinLength	Biotin
Conjugation/Label	46-217 aa
Description	CD32B (FCGR2B) and CD32C (FCGR2C) are 40 kDa, type I transmembrane proteins belonging to the Ig superfamily of low-affinity IgG Fc receptors. CD32B contains an immunoreceptor tyrosine-based inhibition motif (ITIM) in its cytoplasmic tail, while CD32C has an immunoreceptor tyrosine-based activation motif (ITAM). Both receptors can bind monomeric IgG and IgG complexes, and are expressed on B cells, monocytes, macrophages, granulocytes, platelets, and mast cells. CD32B primarily acts as a negative regulator, inhibiting immune cell activation, proliferation, endocytosis, phagocytosis, and degranulation. In contrast, CD32C has an activating function, contributing to immune responses. Together, they play crucial roles in regulating immune cell functions and maintaining immune homeostasis. CD32B and CD32C share almost identical extracellular domain. The aa sequence of Fc gamma

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	RIIB and Fc gamma RIIC are the same for the region expressed (Ala46-Pro217)
Form	Liquid, 1×PBS buffer, pH7.4, 0.22 µm filtered
Molecular Mass	The protein has a predicted molecular weight of 23.5 kDa. Under DTT-reducing conditions, it migrates at approximately 35 kDa on SDS-PAGE.
Endotoxin	Less than 0.1 EU/µg protein as determined by the LAL method
Purity	>95% based on SDS-PAGE under reducing condition
Applications	ELISA, BLI
Storage	Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4 centigrade for up to 2 weeks, or at -20 centigrade or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70 centigrade to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.
Concentration	25 µg size is bottled at 0.2 mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

GENE INFORMATION

Gene Name	FCGR2B Fc fragment of IgG, low affinity IIb, receptor (CD32) [Homo sapiens (human)]
Official Symbol	FCGR2B
Synonyms	FCGR2B; Fc fragment of IgG, low affinity IIb, receptor (CD32); Fc fragment of IgG,

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low affinity IIb, receptor for (CD32), FCG2, FCGR2; low affinity immunoglobulin gamma Fc region receptor II-b; CD32; CD32B; CDw32; fcRII-b; Fc gamma RIIb; fc-gamma-RIIb; fc-gamma RII-b; igG Fc receptor II-b; Fc fragment of IgG, low affinity II, receptor for (CD32); Fc fragment of IgG, low affinity IIb, receptor for (CD32); FCG2; FCGR2; IGFR2;

Gene ID [2213](#)

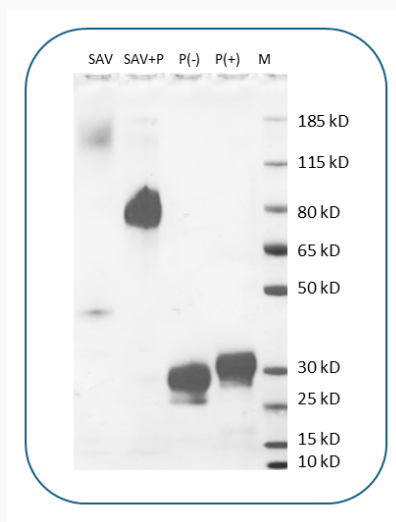
mRNA Refseq [NM_001002273](#)

Protein Refseq [NP_001002273](#)

MIM [604590](#)

UniProt ID [P31994](#)

SDS-PAGE



Human CD32b/c /Fc gamma RIIb (C-His-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under reducing (P+) and non-reducing (P-) conditions

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shows the protein has a purity greater than 95%. A gel shift assay using co-incubation with streptavidin indicates that the biotinylation efficiency of the CD32b/c/Fc gamma RIIB protein exceeds 95%.