



Datasheet for ABIN7536870

FCGR2B Protein (AA 46-217) (His-Avi Tag,Biotin)



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3 Images

Overview

Quantity:	250 µg
Target:	FCGR2B
Protein Characteristics:	AA 46-217
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FCGR2B protein is labelled with His-Avi Tag,Biotin.
Application:	SDS-PAGE (SDS), Surface Plasmon Resonance (SPR), Size-exclusion chromatography-High Pressure Liquid Chromatography (SEC-HPLC)

Product Details

Purpose:	Biotinylated human Fc gamma RIIB / CD32b protein
Sequence:	APPKAVLKLE PQWINVLQED SVTLTCRGTH SPESDSIQWF HNGNLIPTHT QPSYRFKANN NDSGEYTCQT GQTSLSDPVH LTVLSEWLVL QTPHLEFQEG ETIVLRCHSW KDKPLVKVTF FQNGKSKKFS RSDPNFSIPQ ANHSHSGDYH CTGNIGYTLY SSKPVTITVQ APGGGLNDIF EAQKIEWHEG GGENLYFQSG GHHHHHHHHH H
Specificity:	IgG
Characteristics:	The sequence of the extracellular domain of human CD32b (Ala 46-Pro 217) was fused with a C-terminal tag consisting of the AVI tag, TEV protease recognition sequence and a 10-His tag.
Purification:	Nickel and SEC
Purity:	> 95 % by SEC-HPLC

Product Details

Endotoxin Level: <1.0 EU per mg

Biological Activity Comment: Measured by its binding affinity in a SPR assay on a Biacore 8k instrument. Human Fc gamma RIIb / CD32b protein, immobilized on a CM5 chip via an anti-His antibody, can bind to anti-HER2 human IgG1 (trastuzumab) with an affinity constant (KD) of 15 μ M.

Target Details

Target: FCGR2B

Alternative Name: CD32b ([FCGR2B Products](#))

Background: CD32B, FCGR2B, FCGRIIB, FCR2B, FCRIIB, IGFR2B, IGFR1IB
Background: Low affinity immunoglobulin gamma Fc receptor IIb, also known as Fc γ RIIb or CD32b, is a type I integral membrane glycoprotein. CD32b is a member of the immunoglobulin superfamily and is expressed on B cells, subsets of monocytes, macrophages and granulocytes, platelets and mast cells. CD32b binds monomeric IgG with low affinity but is efficient at binding immune complexes and is a negative regulator of cell activation, proliferation, endocytosis, phagocytosis, and degranulation. CD32b is structurally composed of two extracellular immunoglobulin domains of the C2-type that interact with the IgG Fc domain, a transmembrane domain and a short cytoplasmic tail containing the immunoreceptor tyrosine-based inhibition (ITIM) motif. The product provided only contains the extracellular portion of CD32.

Molecular Weight: 23.8 kDa

UniProt: [P31994](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#), [Regulation of Leukocyte Mediated Immunity](#), [Production of Molecular Mediator of Immune Response](#), [BCR Signaling](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

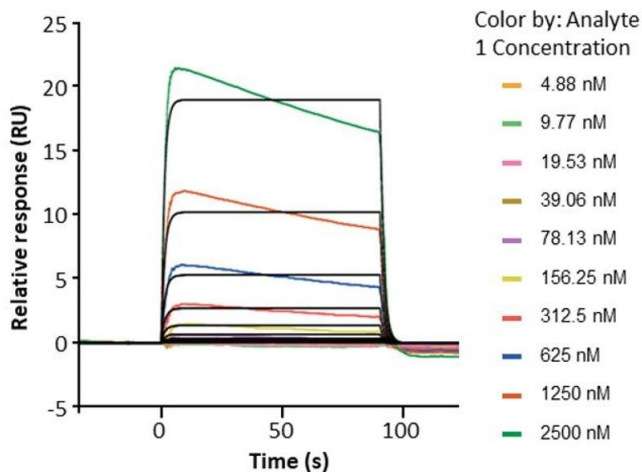
Comment: Biotin to protein ratio is confirmed as 0.7-1.0 by the HABA assay. Product has been site-specifically biotinylated using the AVI tag technology, where the lysine residue within the tag is enzymatically labeled with biotin.

Restrictions: For Research Use only

Handling

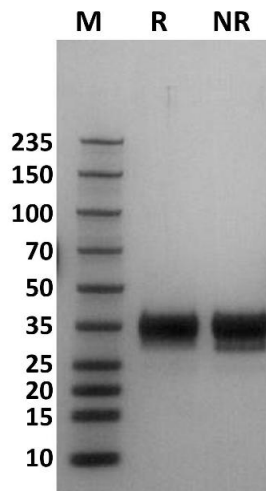
Format:	Lyophilized
Reconstitution:	To obtain a final concentration of 1 mg/mL reconstitute 250 µg vials with 250 µL water and 1.0 mg vials with 1.0 mL water. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Do not vortex.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.2-7.4 (140 mM NaCl, 2.7 mM KCl, 10 mM Na ₂ HPO ₄ , 1.8 mM KH ₂ PO ₄)
Preservative:	Without preservative
Storage:	RT, 4 °C, -20 °C, -80 °C
Storage Comment:	Lyophilized proteins are stable at ambient temperature for at least 2 weeks. If the protein is not to be used immediately then the protein should be stored in lyophilized form at -20 °C for up to 12 months. Once the protein has been reconstituted we recommend storage at 4 °C for up to one week. For longer term storage of protein in solution we recommend aliquoting into smaller vials to avoid repeated freeze-thaw cycles and storage at -20 or -80 °C for up to 3 months. To avoid surface adsorption loss and inactivation we strongly recommend that the protein should not be aliquoted in less than 10 µg per vial.
Expiry Date:	12 months

Images



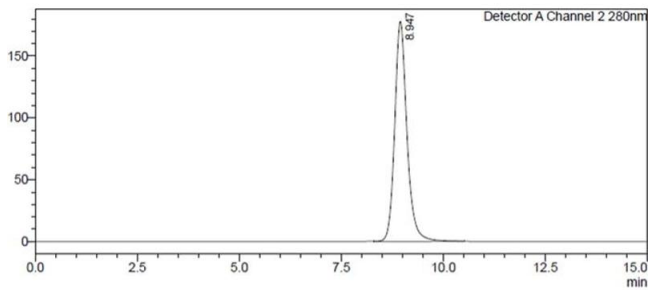
Surface Plasmon Resonance

Image 1. Assessment of binding of human Fc gamma RIIb / CD32b, immobilized on a CM5 chip via an anti-His antibody, to anti-HER2 human IgG1 (trastuzumab) using a Biacore 8K instrument. The protein binds with an affinity constant (KD) of 15 µM.



SDS-PAGE

Image 2. Human Fc gamma RIIb / CD32b protein on Coomassie Blue stained SDS-PAGE under non-reducing (NR) and reducing (R) conditions. The purity of the protein is greater than 95 % .



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 3. Assessment of protein purity for human Fc gamma RIIb / CD32b protein by SEC-HPLC. The protein is greater than 95 % pure.