

Datasheet for ABIN7317026

FCGR2A Protein (Biotin,His-Avi Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	FCGR2A
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This FCGR2A protein is labelled with Biotin,His-Avi Tag.

Product Details

Purpose:	Recombinant Human CD32a/FCGR2A Protein (167 His, His&AVI Tag), Biotinylated(Active)
Sequence:	Met 1-Met 210
Characteristics:	A DNA sequence encoding the extracellular domain (Met 1-Met 210) of human CD32a (P12318-1) was fused with a c-terminal polyhistidine tagged AVI tag at the C-terminus. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed. It is identical to FCGR2A131H/R in the reference.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	1. Measured by its binding ability in a functional ELISA. Immobilized human IgG2 at 10 µg/ml (100 µl/well) can bind biotinylated human CD32 with a linear ranger of 0.16-0.8 µg/ml.2. Using the Octet RED System, the affinity constant (Kd) of CD32a-AVI-His + BirA bound to human IgG was 12nM.3. Labeling ratio of biotin to protein: 0.1-0.6.

Target Details

Target:	FCGR2A
Alternative Name:	CD32a/FCGR2A (FCGR2A Products)
Background:	<p>Background: Receptors for the Fc region of IgG (FcγR) are members of the Ig superfamily that function in the activation or inhibition of immune responses. Human FcγRs are divided into three classes designated FcγRI (CD64), FcγRII (CD32), and FcγRIII (CD16), which generate multiple isoforms, are recognized. The activating- type receptor either has or associates non-covalently with an accessory subunit that has an immunoreceptor tyrosine-based activation motif (ITAM) in its cytoplasmic domain. FcγRI binds IgG with high affinity and functions during early immune responses, whereas FcγRII and RIII are low affinity receptors that recognize IgG as aggregates surrounding multivalent antigens during late immune responses. Three genes for human FcγRII (A, B, and C) and one for mouse (FcγRIIB), encoding type I transmembrane proteins with ITAM motifs (FcγRII A and C) or ITIM motifs (FcγRIIB) in their cytoplasmic domains, have been identified. Human CD32, also known as Low affinity immunoglobulin γ Fc region receptor II-a (IgG Fc receptor II-a), FcγRII A or FCGR2A Protein, is expressed on cells of both myeloid and lymphoid lineages as well as on cells of non-hematopoietic origin. Associated with an ITAM-bearing adapter subunit, FcRγ, CD32a (FcγRII A) delivers an activating signal upon ligand binding, and results in the initiation of inflammatory responses including cytolysis, phagocytosis, degranulation, and cytokine production. The responses can be modulated by signals from the co-expressed inhibitory receptors such as Fcγ RII B, and the strength of the signal is dependent on the ratio of expression of the activating and inhibitory receptors.</p> <p>Synonym: Low affinity immunoglobulin gamma Fc region receptor II-a, IgG Fc receptor II-a, CDw32, Fc-gamma RII-a, Fc-gamma-RIIa, FcRII-a, CD32, FCGR2A, FCG2, FCGR2A1,IGFR2,CD32A,CDw32,Fc gamma RIIA,FCG2,FcGR,FCGR2</p>
Molecular Weight:	23.6 kDa

Application Details

Restrictions:	For Research Use only
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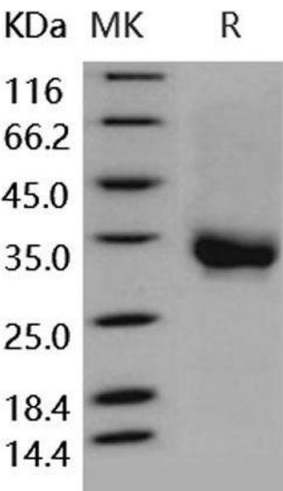
Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C

Handling

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.
Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.