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### FCGR1A Protein (AA 11-288) (His tag, AVI tag, Biotin)

3 Images



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#### Overview

Quantity:	200 μg
Target:	FCGR1A
Protein Characteristics:	AA 11-288
Origin:	Cynomolgus
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This FCGR1A protein is labelled with His tag,AVI tag,Biotin.

#### **Product Details**

Sequence:	AA 11-288
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	BLI verified
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

#### **Target Details**

Target:	FCGR1A
Alternative Name:	Fc gamma RI / CD64 (FCGR1A Products)

#### Target Details

Background:
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Receptors that recognize the Fc portion of IgG are divided into three groups designated Fc gamma RI, RII, and RIII, also known respectively as CD64, CD32, and CD16. Fc gamma RI binds IgG with high affinity and functions during early immune responses. Fc gamma RII and RIII are low affinity receptors that recognize IgG as aggregates surrounding multivalent antigens during late immune responses. High affinity immunoglobulin gamma Fc receptor I is also known as FCGR1A, FCG1, FCGR1, CD64 and IGFR1, is a type of integral membrane glycoprotein that binds monomeric IgG-type antibodies with high affinity, which belongs to the immunoglobulin superfamily or FCGR1 family. FCGR1A / CD64 contains 3 Ig-like C2-type (immunoglobulin-like) domains. CD64 is constitutively found on only macrophages and monocytes, but treatment of polymorphonuclear leukocytes with cytokines like IFNγ and G-CSF can induce CD64 expression on these cells.

Molecular Weight:

34.8 kDa

NCBI Accession:

NP\_001270969

Pathways:

Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

#### **Application Details**

#### Comment:

Ready-to-use AvitagTM biotinylated protein:

The product is exclusively produced using the AvitagTM technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

Restrictions:

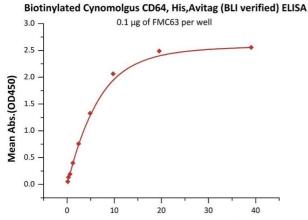
For Research Use only

#### Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Handling Advice:	Please avoid repeated freeze-thaw cycles.

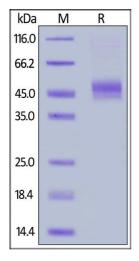
Storage:

#### **Images**



-20 °C

Biotinylated Cynomolgus CD64, His, Avitag (BLI verified) Conc. (ng/mL)



# Biotinylated Cynomolgus CD64, His, Avitag ELISA 0.1 μg of Ipilimumab per well 2.4 0.8 0.0 0.8 Biotinylated Cynomolgus CD64, His, Avitag Conc. (ng/mL)

#### **ELISA**

**Image 1.** Immobilized FMC63 at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Cynomolgus CD64, His,Avitag (BLI verified) (ABIN6810049,ABIN6938894) with a linear range of 0.2-10 ng/mL (Routinely tested).

#### **SDS-PAGE**

**Image 2.** Biotinylated Cynomolgus CD64, His,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than  $90\,\%$ .

#### ELISA

**Image 3.** Immobilized Ipilimumab at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Cynomolgus CD64, His,Avitag (ABIN6810049,ABIN6938894) with a linear range of 0.1-2 ng/mL (QC tested).