

## Recombinant Mouse CD16-2/FCGR4 Protein (His&AVI Tag), Biotinylated

Catalog Number: PKSM040891

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

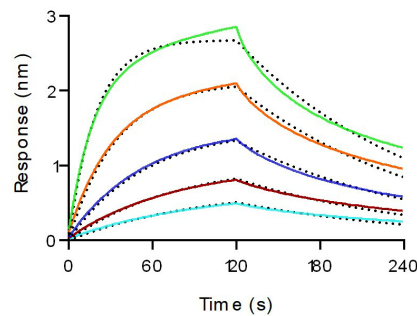
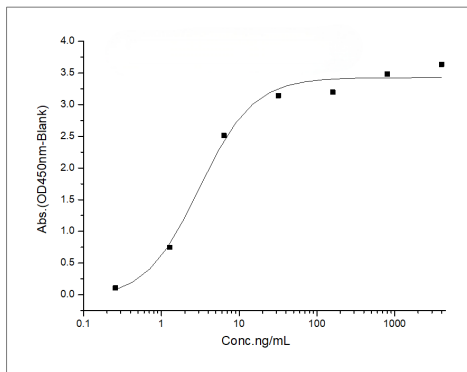
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse CD16-2/FCGR4 protein Met 1-Gln 203, with an C-terminal His & Avi
<b>Calculated MW</b>	24.2 kDa
<b>Accession</b>	NP_653142.2
<b>Bio-activity</b>	1. Measured by its ability to bind human IgG1 (Fc) in a functional ELISA. 2. Labeling ratio of biotin to protein: 0.6

### Properties

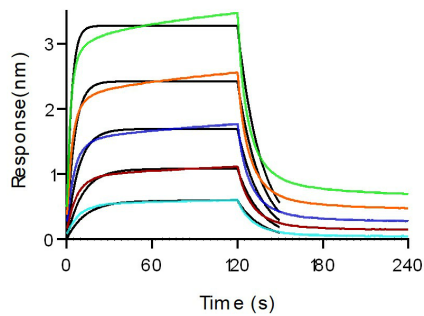
<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



Immobilized OKT3 derived Anti-CD3 antibody, mIgG2a at 5 µg/mL (100 µL/well) can bind Recombinant Mouse CD16-2/FCGR4/Fc gamma RIV Protein (His &AVI Tag), Biotinylated (Cat: PKSM040891) the EC<sub>50</sub> is 1.5-4.5 ng/mL. Loaded Recombinant Mouse FCGR4 Protein, His Tag, Biotinylated (Cat: PKSM040891) on SA Biosensor, can bind Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (OKT3) with an affinity constant of 22.6nM as determined in BLI assay (Sartorius Octet RED384)(QC tested).

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Loaded Biotinylated Recombinant Mouse CD16-2/FCGR4/Fc gamma RIV Protein, His &AVI Tag (Cat. No. PKSM040891) on SA Biosensor, can bind Rituximab derived Anti-CD20(Ro) Antibody, Human IgG1 with an affinity constant of 0.475  $\mu\text{M}$  as determined in BLI assay (Sartorius Octet RED384) .

## Background

Fcgr4, also known as CD16-2, is one of the receptors for Fc region of IgG which involve in immune responses. Fcgr4 mainly functions in cellular response to lipopolysaccharide, NK T cell proliferation, regulation of sensory perception of pain, wound healing etc. Three groups are included for Fc  $\gamma$  receptors (FcR), and they are Fc  $\gamma$  RI (CD64), Fc  $\gamma$  RII (CD32), and Fc  $\gamma$  RIII (CD16). Among these, CD64 possess high affinity even for monomeric IgG, while CD32 and CD16 display a relative lower affinity for IgG. Genes encodes these receptors are diverse differing by species and cell types. The aggregation of FcR having immunoreceptor tyrosine-based activation motifs (ITAMs) activates sequentially src family tyrosine kinases and syk family tyrosine kinases that connect transduced signals to common activation pathways shared with other receptors. FcR with ITAMs elicit cell activation, endocytosis, and phagocytosis. Fcgr4 belongs to Fc  $\gamma$  RIII (CD16) group.

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