

## Recombinant Mouse CD16-2/FCGR4 Protein (His Tag)

**Catalog Number: PKSM040893**

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

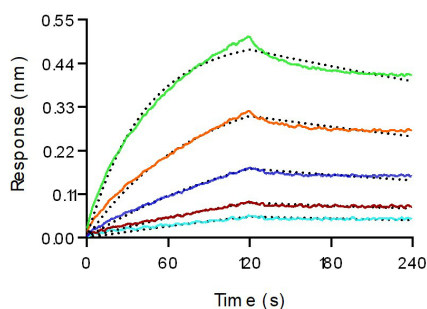
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse CD16-2/FCGR4 protein Met 1-Gln 203, with an C-terminal His
<b>Calculated MW</b>	22.4 kDa
<b>Observed MW</b>	25-35 kDa
<b>Accession</b>	NP_653142.2
<b>Bio-activity</b>	Measured by its binding ability in a functional ELISA. Immobilized mouse FCGR4 at 10 µg/ml (100 µl/well) can bind recombinant human IgG1 (Fc). The EC <sub>50</sub> of human IgG1 (Fc) is 0.11-0.25 µg/ml.

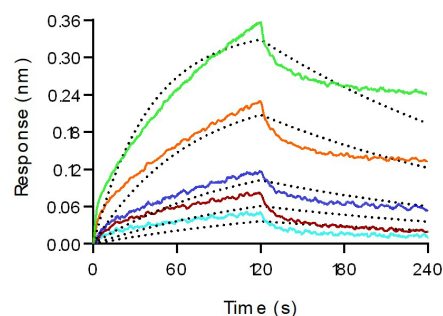
### Properties

<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



Loaded Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (OKT3) on ProA Biosensor, can bind Recombinant Mouse FCGR4 Protein, His Tag (Cat: PKSM040893) with an affinity constant of 3.43nM as determined in BLI assay (Sartorius Octet RED384)(QC tested).



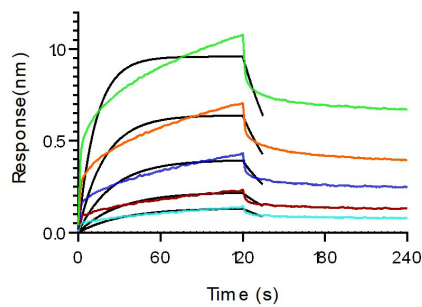
Loaded Recombinant Mouse FCGR4 Protein, His Tag (Cat: PKSM040893) on His1K Biosensor, can bind Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (OKT3) with an affinity constant of 17.7nM as determined in BLI assay (Sartorius Octet RED384).

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Loaded Recombinant Mouse CD16-2/FCGR4/Fc gamma RIV Protein, His Tag (Cat. No. PKSM040893) on NTA Biosensor, can bind Herceptin derived Anti-ErbB2 Antibody, Human IgG1 with an affinity constant of 69.300 nM 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 encode 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.