

# Recombinant Rat CD16a/FCGR3A Protein (His Tag)

Catalog Number:PKSR030403



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

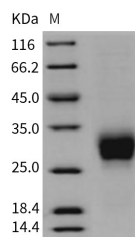
## Description

|                                    |   |
|------------------------------------|---|
| <b>Synonyms</b>                    | Fcgr4   |
| <b>Species</b>                     | Rat   |
| <b>Expression Host</b>             | HEK293 Cells  |
| <b>Sequence</b>                    | Met 1-Pro 200   |
| <b>Accession</b>                   | XP_008767961.1  |
| <b>Calculated Molecular Weight</b> | 21.7 kDa  |
| <b>Observed molecular weight</b>   | 28-33 kDa   |
| <b>Tag</b>                         | C-His   |
| <b>Bioactivity</b>                 | Immobilized rat FCGR3A-His at 10 µg/ml (100 µl/well) can bind biotinylated human IgG1, The EC50 of biotinylated human IgG1 is 59.0-139.0 ng/ml. |

## Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 97 % 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<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.            |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

## Data



> 97 % as determined by reducing SDS-PAGE.

## Background

The Fc receptor with low affinity for IgG (FCGR3, or CD16) is encoded by 2 nearly identical genes, FCGR3A and FCGR3B, resulting in tissue-specific expression of alternative membrane-anchored isoforms. FCGR3A, it is also known as CD16a, encodes a transmembrane protein expressed on activated monocytes/macrophages, natural killer (NK) cells, and a subset of T cells. CD16a / FCGR3A is a receptor expressed on NK cells that facilitates antibody dependent cellular cytotoxicity (ADCC) by binding to the Fc portion of various antibodies. CD16a / FCGR3A also has a broader function. CD16a / FCGR3A is directly involved in the lysis of some virus-infected cells and tumor cells by NK cells, independent

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017

# Recombinant Rat CD16a/FCGR3A Protein (His Tag)

Catalog Number:PKSR030403



of antibody binding. Cross-linking of CD16a / FCGR3A on NK cells resulted in increased intracellular Ca<sup>2+</sup> levels and a cascade of biochemical events similar to those activated by the T cell receptor. CD16a / FCGR3A on human NK cells is a lysis receptor that mediates the direct killing of some virus infected and tumor cells, independent of antibody ligation.

---

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Tel: 1-832-243-6086

Fax: 1-832-243-6017

Web: [www.elabscience.com](http://www.elabscience.com)

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)