

## Rabbit Monoclonal Antibody to Mouse CD16-2/FCGR4

**Cat. No.** CAB11544RM    **Lot. No.** (See product label)

### SPECIFICATION

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| <b>Product Overview</b>    | Rabbit Monoclonal Antibody to Mouse CD16-2/FCGR4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Species</b>             | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>              | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Antigen Description</b> | <p>Receptors for the Fc region of IgG (Fc gamma Rs) constitute a subfamily of the Ig superfamily, and function in the activation or inhibition of immune responses. Based on close relationships in their extracellular domains, the Fc gamma R have been divided into three classes designated as Fc gamma RI (CD64), Fc gamma RII (CD32), and Fc gamma RIII (CD16). Human CD16 is encoded by two genes: Fc gamma RIIIA and Fc gamma RIIB, and the newly described mouse FCGR4, also referred to as CD16-2, has been proposed to be the mouse homolog of human Fc gamma RIIIA because of high sequence homology (60% aa identity). FCGR4 is expressed in peripheral blood leukocytes, spleen, thymus, colon and intestine, and serves as an activating receptor for IgG2a and IgG2b via association with an ITAM bearing accessory protein. Although mouse FCGR4 functioned as a low-affinity IgE receptor for all IgE allotypes, ligation of FCGR4 by antigen-IgE(b) immune complexes promotes macrophage-mediated phagocytosis, presentation of antigen to T cells, production of proinflammatory cytokines and the late phase of cutaneous allergic reactions.</p> |
| <b>specificity</b>         | Mouse CD16-2 / FCGR4, Has cross-reactivity in ELISA with, Human CD64 / FCGR1A. No cross-reactivity in ELISA with Human CD16a / FCGR3A / FcRIIIa,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | Human CD16b / FCGR3B / FcRIIIb, Human CD32a / FCGR2A, Human CD32b / FCGR2B, Mouse CD16 / FCGR3, Human cell lysate (293 cell line)                                                                                                                                                                                                                                                                                                                                          |
| <b>Target</b>       | Fcgr4                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen</b>    | Recombinant mouse FCGR4 protein                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Isotype</b>      | Rabbit IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>species</b>      | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Clone</b>        | 23                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Applications</b> | Flow Cytometry;Western blot;Direct ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Dilution</b>     | Western blot: This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect mouse FCGR4 in WB.Using a DAB detection system, the detection limit for mouse FCGR4 is approximately 0.125 ng/lane under non-reducing conditions and 2 ng/lane under reducing conditionsELISA: This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect mouse FCGR4. The detection limit for mouse FCGR4 is 0.00245 ng/well |
| <b>Preparation</b>  | This antibody was obtained from a rabbit immunized with purified, human cell-derived, recombinant mouse FCGR4.                                                                                                                                                                                                                                                                                                                                                             |
| <b>Buffer</b>       | 0.2 µm filtered solution in PBS with 5% trehalose                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Storage</b>      | This antibody can be stored at 2-8 °C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 to -70 °C. Preservative-Free. Sodium azide is recommended to avoid                                                                                                                                                                                                                         |

contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. Avoid repeated freeze-thaw cycles.

**Size** 100µg

## GENE INFORMATION

**Gene Name** [Fcgr4 Fc receptor, IgG, low affinity IV \[ Mus musculus \]](#)

**Official Symbol** Fcgr4

**Synonyms** FCGR4; Fc receptor, IgG, low affinity IV; Fc gammaRIV; Fc receptor-like 3; Fc fragment of IgG, low affinity IIIa, receptor for (CD16); Fc fragment of IgG, low affinity III, receptor for (CD16); Fcrl3; CD16-2; FcgrIV; Fcgr3a; FcgammaRIV; 4833442P21Rik;

**Gene ID** [246256](#)

**mRNA Refseq** [NM\\_144559](#)

**Protein Refseq** [NP\\_653142](#)

**Pathway** Adaptive Immune System, organism-specific biosystem; Immune System, organism-specific biosystem; Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell, organism-specific biosystem; Leishmaniasis, organism-specific biosystem; Leishmaniasis, conserved biosystem; Natural killer cell mediated cytotoxicity, organism-specific biosystem; Natural killer cell mediated cytotoxicity, conserved biosystem;

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