



## Monoclonal Anti-mouse M-CSF R Antibody

### ORDERING INFORMATION

**Catalog Number:** MAB3818

**Clone:** 460615

**Lot Number:** CAQZ02

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

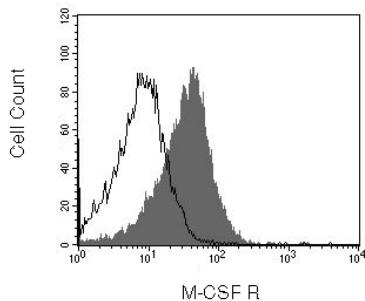
**Specificity:** mouse M-CSF R

**Immunogen:** NS0-derived rmM-CSF R

**Ig class:** rat IgG<sub>2b</sub>

**Recommended Application:**  
Flow cytometry

**Other Application:**  
Direct ELISA



Raw264 cells were stained with anti-M-CSF R (Catalog # MAB3818, clone 460615, filled histogram) or isotype control (Catalog # MAB0061, open histogram) followed by APC-conjugated anti-rat antibody (Catalog # F0113).

### Background

M-CSF R (macrophage colony stimulating factor receptor, *c-fms*) is a 165 kDa, 977 amino acid (aa) type I membrane glycoprotein. It is a member of the type III subfamily of receptor tyrosine kinases that contain five extracellular immunoglobulin-like domains and a cytosolic split kinase domain. M-CSF receptor is expressed primarily on monocytes, macrophages, dendritic cells, and stem cells, and regulates lineage decisions and maturation of these cells. The mouse M-CSF R extracellular domain shares > 99% aa identity with rat and 60 - 63% aa identity with human, dog, cat and cow M-CSF R. It can be released by TACE/ADAM17 cleavage.

### Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified NS0-derived recombinant mouse M-CSF R (rmM-CSF R; aa 20 - 511; Accession # P09581). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody detects rmM-CSF R in direct ELISAs. In this format, this antibody does not cross-react with rhM-CSF R, rmPDGF R $\beta$ , or rmFlt-3 Ligand.

### Application

**Flow cytometry** - This antibody was tested for flow cytometry using Raw264 cells. Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 2.5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding a secondary developing reagent such as anti-rat IgG conjugated to a fluorochrome.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse M-CSF R. The detection limit for rmM-CSF R is approximately 3 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**

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