

# NeutraKine®M-CSF Monoclonal antibody

Catalog Number: 69033-1-Ig

## Basic Information

Catalog Number:

69033-1-Ig

Size:

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

HZ-1192

GenBank Accession Number:

GeneID (NCBI):

1435

Full Name:

colony stimulating factor 1  
(macrophage)

Purification Method:

Protein G purification

CloneNo.:

4C6C5

Affinity:

$K_D = 8.48 \times 10^{-9}$

$K_{off} = 4.75 \times 10^{-4}$

$K_{on} = 5.60 \times 10^4$

## Applications

Tested Applications:

Neutralization, ELISA

Species Specificity:

Human

## Background Information

M-CSF plays an essential role in the regulation of survival, proliferation, and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes. M-CSF promotes the release of proinflammatory chemokines and thereby plays an important role in innate immunity and in inflammatory processes. It also plays an important role in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone development. On the cellular level, M-CSF promotes reorganization of the actin cytoskeleton, regulates the formation of membrane ruffles, cell adhesion, and cell migration, and plays a role in lipoprotein clearance.

This antibody is used to neutralize the bioactivity of M-CSF.

## Storage

Storage:

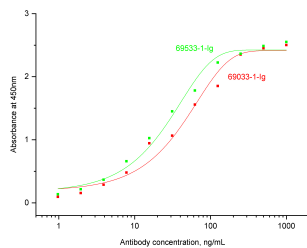
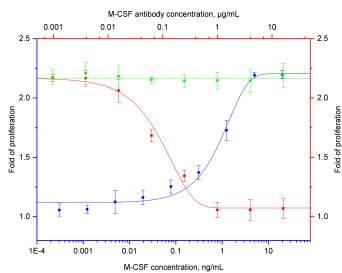
Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at (4°C) for short term or at (-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

Storage Buffer:

Sterile PBS.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Recombinant human M-CSF (Cat.NO. HZ-1192) stimulates the proliferation of OCI-AML5 cells in a dose-dependent manner (blue curve, refer to bottom X-left Y). The activity of human M-CSF (5 ng/mL) is neutralized by mouse anti-human M-CSF monoclonal antibody 69033-1-Ig at serial dose (red curve, refer to top X-right Y). The ND50 is typically 0.1-0.4  $\mu$ g/mL. The control mouse anti-human M-CSF monoclonal antibody 69533-1-Ig could recognize human M-CSF, but could not neutralize human M-CSF

Indirect ELISA was carried out by coating recombinant Human M-CSF (Cat.NO. HZ-1192) at 70 ng/well followed by blocking and adding serial diluted M-CSF antibody 69033-1-Ig and 69533-1-Ig respectively. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm.