

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat M-CSF in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse M-CSF and recombinant human M-CSF is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 427406
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant rat M-CSF Glu33-Glu261 Accession # Q8JZQ0
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Rat M-CSF

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

M-CSF, also known as CSF-1, is a four- α -helical-bundle cytokine that is essential for survival, proliferation and differentiation of macrophages and osteoclast progenitors. M-CSF is produced by fibroblasts, activated macrophages, endometrial secretory epithelium, bone marrow stromal cells and activated endothelial cells. Full-length rat M-CSF transcripts encode a 534 amino acid (aa) type I transmembrane mature protein. In humans this encodes a 70 kDa protein that forms covalent homodimers. Human 22 kDa, 43 kDa and proteoglycan-modified 200 kDa secreted forms and 34 kDa transmembrane forms may also occur in rats. Mature rat M-CSF shares 89% and 74% aa identity with mouse and human M-CSF, respectively, within the first 229 aa.