

MCSF Polyclonal Antibody

catalog number: **AN006860L**

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

Description

Reactivity	Rat
Immunogen	Recombinant Mouse MCSF protein expressed by E.coli
Host	Rabbit
Isotype	IgG
Purification	Antigen Affinity Purification
Buffer	PBS with 0.05% Proclin300, 1% protective protein and 50% glycerol, pH7.4

Applications

Recommended Dilution

WB	1:500-1:1000
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Data



Western blot with Anti MCSF Polyclonal antibody at dilution of 1:1000. Lane 1: Rat colon tissue lysate.

Observed-MW:43 kDa

Calculated-MW:61 kDa

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

For Research Use Only

M-CSF, also known as CSF-1, is a four-alpha-helical-bundle cytokine that is the primary regulator of macrophage survival, proliferation and differentiation. M-CSF protein is also essential for the survival and proliferation of osteoclast progenitors. M-CSF also primes and enhances macrophage killing of tumor cells and microorganisms, regulates the release of cytokines and other inflammatory modulators from macrophages, and stimulates pinocytosis. M-CSF increases during pregnancy to support implantation and growth of the decidua and placenta. Sources of M-CSF include fibroblasts, activated macrophages, endometrial secretory epithelium, bone marrow stromal cells and activated endothelial cells. The M-CSF receptor (c-fms) transduces its pleiotropic effects and mediates its endocytosis. M-CSF mRNAs of various sizes occur. Full length mouse M-CSF transcripts encode a 520 amino acid (aa) type I transmembrane (TM) protein with a 462 aa extracellular region, a 21 aa TM domain, and a 37 aa cytoplasmic tail that forms a 140 kDa covalent dimer. Differential processing produces two proteolytically cleaved, secreted dimers. One is an N- and O-glycosylated 86 kDa dimer, while the other is modified by both glycosylation and chondroitin-sulfate proteoglycan (PG) to generate a 200 kDa subunit. Although PG-modified M-CSF protein can circulate, it may be immobilized by attachment to type V collagen. Shorter transcripts encode M-CSF that lacks cleavage and PG sites and produces an N-glycosylated 68 kDa TM dimer and a slowly produced 44 kDa secreted dimer. Although forms may vary in activity and half-life, all contain the N-terminal 150 aa portion that is necessary and sufficient for interaction with the M-CSF receptor. The first 229 aa of mature mouse M-CSF shares 87%, 83%, 82% and 81% aa identity with corresponding regions of rat, dog, cow and human M-CSF, respectively. Human M-CSF is active in the mouse, but mouse M-CSF is reported to be species-specific.