

Recombinant Mouse M-CSF/CSF1 (His, Flag)

Information BO



Gene ID	12977
Accession #	P07141
Alternate Names	colony stimulating factor 1 (macrophage); CSF1; CSF-1; MCSF; M-CSF
Source	HEK293
Protein sequence	KEVSEHCSHMIGNGHLKVLQQLIDSQMETSCQIAFEFVDQEQLDDPVCYLKKAFFLVQDIIDETMRFKDNTP NANATERLQELSNNLNSCFTKDYEEQNKACVRTFHETPLQLLEKIKNFFNETKNLLEKDWNIFTKNCNNSFA KCSSRDVVTKPDCNCLYPKATPSSDPASASPHQPPAPSMAPLAGLAWDDSQRTEGSSLLPSELPLRIEDPG SAKQRPPRSTCQTLE
Tag	N-His, N-Flag
M.Wt	The protein has a calculated MW of 25.9 KDa.
Appearance	Solution protein.
Stability & Storage	Avoid repeated freeze-thaw cycles. It is recommended that the protein be aliquoted for optimal storage2 years from date of receipt, -20 to -70 °C as supplied.
Concentration	1 mg/mL
Formulation	Supplied as a 0.2 µm filtered solution in PBS, pH7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	Fully biologically active as determined by a cell proliferation assay using MNFS60 mouse myelogenous leukemia lymphoblast cells. The EC50 for this effect is 1 ng/mL.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Quality Control

Purity	> 95 % by SDS-PAGE.
Endotoxin	Less than 1.0 EU/µg as determined by LAL method.

Description

Macrophage colony-stimulating factor (M-CSF), also known as CSF-1, is a quadruple α helical bundle cytokine that is the main regulator of macrophage survival, proliferation, and differentiation. The M-CSF protein is also essential for the survival and proliferation of osteoclast precursor cells. M-CSF also initiates and enhances macrophage killing of tumor cells and microorganisms, regulates the release of cytokines and other inflammatory modulators by macrophages, and stimulates phagocytosis. M-CSF is increased during pregnancy to support the 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 macrophage colony-stimulating factor receptor (c-FMS) transduces its chemotaxis and mediates its endocytosis. The first 229 amino acids of mouse mature M-CSF have 87%, 83%, 82%, and 81% homology to the corresponding regions of rat, dog, bovine, and human M-CSF, respectively. Human M-CSF is active in mice, but

M-CSF from mice has been reported to be species-specific.













APExBIO Technology www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054. Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com