

Purified anti-human M-CSF Antibody

Catalog# / Size	526002 / 500 µg
Clone	L1617F1
Regulatory Status	RUO
Other Names	CSF1, CSF-1, MCSF
Isotype	Mouse IgG2b, κ
Description	<p>M-CSF is a cytokine that controls the production, differentiation, and function of macrophages. The active form of the protein is found extracellularly as a disulfide-linked homodimer. M-CSF is released by fibroblasts, breast cancer cell lines, alveolar macrophages, stromal bone marrow cells, endothelial cells, and mesenchymal cells. It binds CD14⁺ monocytes and promotes the survival/proliferation of human peripheral blood monocytes. In addition, M-CSF enhances inducible monocyte functions including phagocytic activity, microbial killing, cytotoxicity for tumor cells as well as synthesis of inflammatory cytokines such as IL-1, TNF-α, and IFN-γ in monocytes. M-CSF induces RANKL production in mature human osteoclasts and, consequently, this makes M-CSF a potent stimulator of mature osteoclast resorbing activity. Also, M-CSF induces VEGF production in human monocytes and human tumor cells. High levels of M-CSF, mononuclear phagocytes, and VEGF are associated with poor prognosis in patients with cancer.</p>

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human M-CSF
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.5 - 2.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
RRID	AB_2563444 (BioLegend Cat. No. 526002)

Antigen Details

Structure	Three isoforms with 256-554 amino acids, predicted molecular weight of approximately 30-70 kD.
Distribution	Cell membrane; single-pass membrane protein. Processed macrophage colony-stimulating factor 1: secreted, extracellular space.
Function	Controls the production, differentiation, and function of macrophages.
Interaction	Homodimer or heterodimer, disulfide-linked. Interacts with CSF1R.
Ligand/Receptor	M-CSFR or CSF1R (CD115).
Biology Area	Cell Biology, Cell Proliferation and Viability, Immunology

Molecular Family Cytokines/Chemokines, Growth Factors

Antigen References

1. Kawasaki ES, *et al.* 1985. *Science* 230:291.
2. Wei S, *et al.* 2010. *J. Leuko. Biol.* 88:495.
3. Hodge JM, *et al.* 2011. *PLoS One* 6:e21462.
4. Morandi A, *et al.* 2011. *PLoS One* 6:e27450.
5. Erlich B, *et al.* 2011. *PLoS One* 6:e26317.
6. MacDonald KP, *et al.* 2010. *Blood* 116:3955.

Gene ID [1435](#)

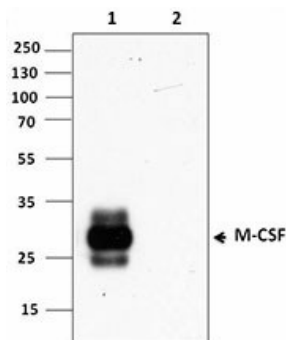
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-human M-CSF

Product Data



Western blot analysis of 50 ng of recombinant human M-CSF (lane 1) and 50 ng of recombinant mouse M-CSF (lane 2) using anti-human M-CSF antibody (clone L1617F1).

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