



Rabbit Anti-MCSF antibody

SL1042R

Product Name:	MCSF
Chinese Name:	巨噬细胞克隆刺激因子抗体
Alias:	M-CSF; Macrophage Colony Stimulating Factors; Colony stimulating factor 1 (macrophage); Colony stimulating factor 1; Colony stimulating factor macrophage specific; CSF 1; CSF1; Csfm; Lanimostim; M CSF; Macrophage Colony Stimulating Factor 1; MCSF; MGC31930.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	60kDa
Cellular localization:	The cell membraneExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse MCSF:461-552/552<Cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Four distinct colony-stimulating factors (CSFs) that promote survival, proliferation and differentiation of bone marrow precursor cells have been well characterized: granulocyte macrophage CSF (GMCSF), granulocyte CSF (GCSF), macrophage CSF (MCSF), and

Interleukin-3 (IL-3, Multi CSF). Both GM-CSF and IL-3 are multipotential growth factors, stimulating proliferation of progenitor cells from more than one hematopoietic lineage. In contrast, G-CSF and M-CSF are lineage restricted hematopoietic growth factors, stimulating final mitotic divisions and the terminal cellular maturation of the partially differentiated hematopoietic progenitors.

Macrophage CSF, also known as CSF1, is produced by monocytes, fibroblasts and endothelial cells. It stimulates the formation of macrophage colonies, enhances antibody-dependent, cell-mediated cytotoxicity by monocytes and macrophages, and inhibits bone resorption by osteoclasts. Natural human M-CSF is a dimeric glycoprotein of 70-90 kD molecular weight, existing in multiple glycosylation forms. It binds to a 165 kD glycoprotein of the receptor tyrosine kinase subclass III, a family that includes the receptors for platelet derived growth factor (PDGF) and stem cell factor (SCF).

Function:

Cytokine that plays an essential role in the regulation of survival, proliferation and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. Promotes the release of proinflammatory chemokines, and thereby plays an important role in innate immunity and in inflammatory processes. Plays an important role in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone development. Required for normal male and female fertility. Promotes reorganization of the actin cytoskeleton, regulates formation of membrane ruffles, cell adhesion and cell migration. Plays a role in lipoprotein clearance.

Subunit:

Homodimer or heterodimer; disulfide-linked. Interacts with CSF1R.

Subcellular Location:

Cell membrane; Single-pass membrane protein. Processed macrophage colony-stimulating factor 1: Secreted, extracellular space.

Post-translational modifications:

N-glycosylated. The predominant soluble form is a chondroitin sulfate-containing proteoglycan.

DISEASE:

Note=A defect in Csf1 is the cause of osteopetrosis. Osteopetrotic mice (op/op) are severely deficient in mature macrophages and osteoclasts, display failed tooth eruption, and have a restricted capacity for bone remodeling.

SWISS:

P09603

Gene ID:

1435

Database links:

[Entrez Gene: 1435](#)Human

[Entrez Gene: 12977](#)Mouse

[Entrez Gene: 78965](#)Rat

[Oimim: 120420](#)Human

[SwissProt: P09603](#)Human

[SwissProt: P07141](#)Mouse

[SwissProt: Q8JZQ0](#)Rat

[Unigene: 591402](#)Human

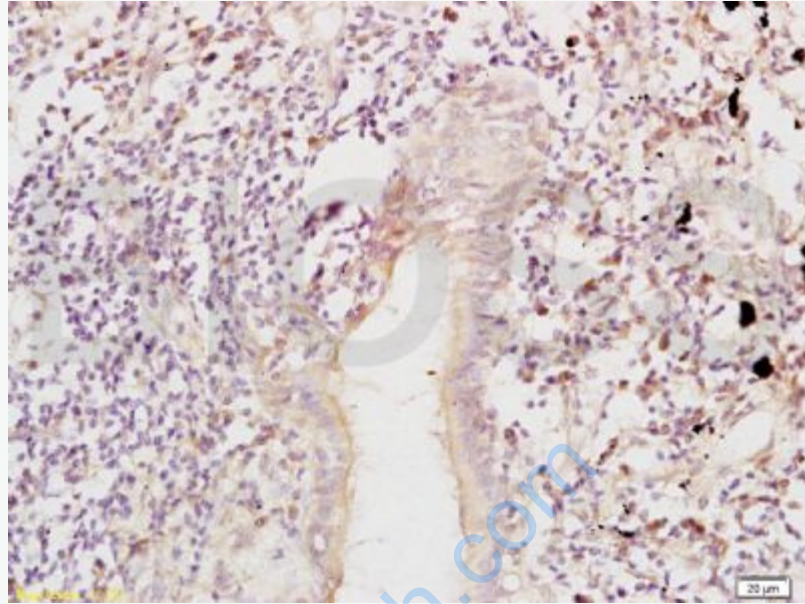
[Unigene: 795](#)Mouse

[Unigene: 83632](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

M-CSF是促使造血Cell differentiation成粒细胞与巨噬细胞克隆的重要cell factor,对正常血细胞的形成与造血细胞的存活、分化、正常造血功能的维持具有重要作用,直接与间接增加lak细胞的活性,在人体的cell factor网络中占有重要的地位,目前广泛应用于化.放疗的辅助治疗中。目前研究主要应用在免疫缺陷性疾病及病毒性疾病:慢性肝病,尤其是与病毒相关的疾病,因其发病过程涉及免疫细胞与造血系统,有可能成为gm-csf(粒细胞-巨噬细胞克隆刺激因子)应用的新领域。人和小鼠天然M-CSF为glycoprotein,由二硫键连接的同源双体,分子量40~90kDa。人和小鼠M-CSF分子这个区域结构高度保守,其同源性达80%。



Picture:

Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MCSF Polyclonal Antibody, Unconjugated(SL1042R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining