ARG70133
Human M-CSF recombinant protein (Active) (His-tagged, C-ter)

Package: 100 µg, 20 µg
Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Human M-CSF recombinant protein
Tested Application	SDS-PAGE
Target Name	M-CSF
Species	Human
A.A. Sequence	Glu33 - Ser190
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce proliferation in NFS-60 cells. The ED50 for this effect is less than 1 ng/mL. The specific activity of recombinant human M-CSF is approximately > 2.5x 10^8 IU/mg.
Alternate Names	Macrophage colony-stimulating factor 1; CSF-1; Lanimostim; M-CSF; MCSF

Properties

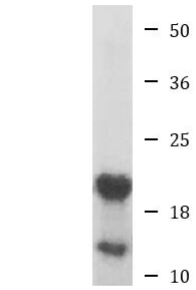
Form	Powder
Purification Note	Endotoxin level is 98% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CSF1
Gene Full Name	colony stimulating factor 1 (macrophage)
Background	The protein encoded by this gene 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, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. The encoded protein may be involved in development of the placenta. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2011]
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. [UniProt]
PTM	N- and O-glycosylated. Glycosylation and proteolytic cleavage yield different soluble forms. One high molecular weight soluble form is a proteoglycan containing chondroitin sulfate. O-glycosylated with core 1 or possibly core 8 glycans. Isoform 1 is N- and O-glycosylated. Isoform 3 is only N-glycosylated. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Processed macrophage colony-stimulating factor 1: Secreted, extracellular space. [UniProt]

Images



Human M-CSF recombinant protein

ARG70133 Human M-CSF recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70133 Human M-CSF recombinant protein (Active) (His-tagged, C-ter).