

Colony Stimulating Factor 1, Macrophage (MCSF) Active Protein | MCSF active protein

Active Colony Stimulating Factor 1, Macrophage (MCSF)

CATALOG # AAA148162	HOST E Coli	REACTIVITY Mouse	APPLICATIONS Activity Assay, Cell Culture
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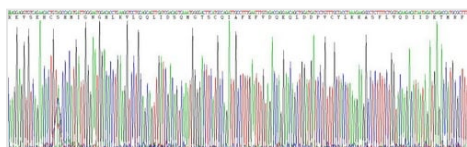
PRODUCT SYNONYMS

Colony Stimulating Factor 1; Macrophage (MCSF); Active Colony Stimulating Factor 1; CSF1; M-CSF; Lanimostim; Processed macrophage colony-stimulating factor 1; MCSF active protein

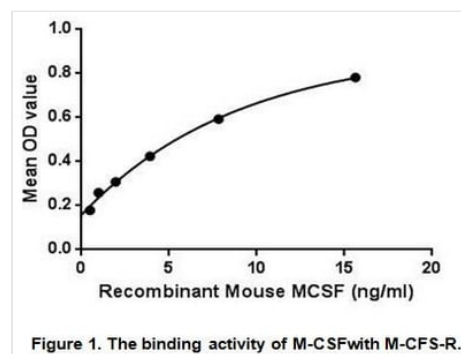
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Mouse
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	257
Applicable Applications for MCSF active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Lys33~Ser204
Isoelectric Point	6

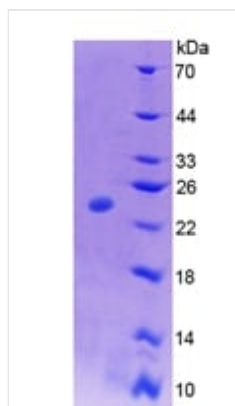
IMAGES



Application Data



Application Data



SDS-PAGE

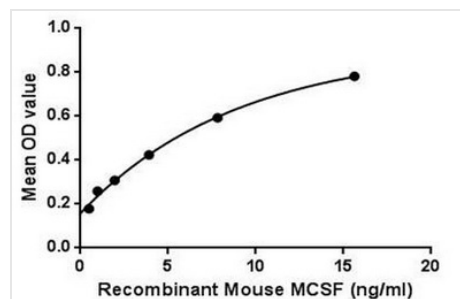


Figure 1. The binding activity of M-CSF with M-CFS-R.

Activity

Macrophage Colony Stimulating Factor (M-CSF), also known as CSF-1, is a secreted cytokine which influences hematopoietic stem cells to differentiate into macrophages or other related cell types. M-CSF (or CSF-1) is a hematopoietic growth factor that is involved in the proliferation, differentiation, and survival of monocytes, macrophages, and bone marrow progenitor cells. It can also affect macrophages and monocytes in several ways, including stimulating increased phagocytic and chemotactic activity, and increased tumour cell cytotoxicity. The role of M-CSF is not only restricted to the monocyte/macrophage cell lineage. By interacting with its membrane receptor (CSF1R or M-CSF-R encoded by the c-fms proto-oncogene), M-CSF also modulates the proliferation of earlier hematopoietic progenitors and influence numerous physiological processes involved in immunology, metabolism, fertility and pregnancy. Besides, Colony Stimulating Factor Receptor, Macrophage (M-CFS-R) has been identified as an interactor of M-CSF, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse M-CSF and recombinant mouse MCFSR. Briefly, M-CSF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to M-CFS-R-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-M-CSF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of M-CSF and M-CFS-R was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for MCSF active protein	Cytokine; Infection immunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	166064046
NCBI GeneID	12977
NCBI Accession #	NP_001107001.1
NCBI GenBank Nucleotide #	NM_001113529.1
UniProt Accession #	P07141; Q3U395; Q8R3C8
Molecular Weight	Predicted Molecular Weight: 23.5kDa Accurate Molecular Weight: 24kDa
NCBI Official Full Name	macrophage colony-stimulating factor 1 isoform 2
NCBI Official Synonym Full Names	colony stimulating factor 1 (macrophage)
NCBI Official Symbol	Csf1
NCBI Official Synonym Symbols	op; Csfm; MCSF; C87615
NCBI Protein Information	macrophage colony-stimulating factor 1
UniProt Protein Name	Macrophage colony-stimulating factor 1

UniProt Gene Name	Csf1
UniProt Synonym Gene Names	Csfm; CSF-1; MCSF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-mouse-active-protein/colony-stimulating-factor-1-macrophage-mcsf/148162>