Active Recombinant Human CSF1 protein, His-GST-tagged

Cat. No. CSF1-698H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human CSF1 protein(P09603)(33~496 aa), fused with N-terminal His tag and GST tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	33-496 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-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 affects 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

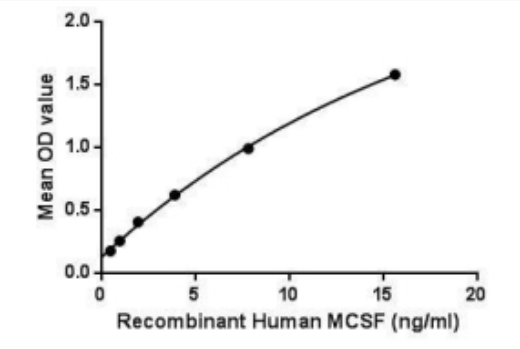
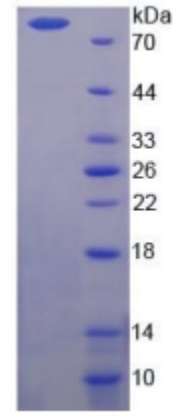
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	identified as an interactor of M-CSF, thus a binding ELISA assay was conducted to detect the interaction of recombinant human M-CSF and recombinant human MCFSR Briefly, M-CSF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to M-CFS-R-coated microtiter wells and incubated for 2h at 37°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°C. Finally, add 50µ stop solution to the wells and read at 450nm immediately. The binding activity of of M-CSF and M-CFS-R was shown, and this effect was in a dose dependent manner.
Molecular Mass	80.2kDa
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in ddH2O to a concentration of 0.1-0.5 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	CSF1 colony stimulating factor 1 (macrophage) [Homo sapiens]
Official Symbol	CSF1
Synonyms	CSF1; colony stimulating factor 1 (macrophage); macrophage colony-stimulating factor 1; M CSF; MCSF; MGC31930; lanimostim; CSF-1;
Gene ID	1435

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mRNA Refseq	NM_000757
Protein Refseq	NP_000748
MIM	120420
UniProt ID	P09603
Activity	
SDS-PAGE	

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