

## GFH3AF Recombinant Human MCSF (Animal-Free)

### Description

Macrophage Colony Stimulating Factor (MCSF) is a hematopoietic growth factor that is widely produced by a variety of cells. MCSF stimulates the proliferation and differentiation of hematopoietic stem cells into monocyte and macrophage cell types. MCSF also acts through the colony stimulating factor 1 receptor (CSF1R) to modulate processes involved in immunology, bone metabolism, fertility, and pregnancy. Human MCSF shows activity on mouse cells, however mouse MCSF shows no activity on human cells.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

<b>Length</b>	159 / 218 aa
<b>Molecular Weight</b>	18.5 / 37.1 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P09603
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

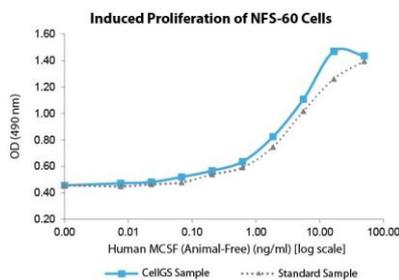
### Specifications

<b>Alternative Names</b>	Macrophage Colony Stimulating Factor, M-CSF, MGI-IM, CSF-1
<b>Biological Activity</b>	Human MCSF (Animal-Free) is fully biologically active when compared to standard. The activity is determined by the ability to induce NFS-60 cells proliferation.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 50 mM sodium chloride, pH 8.0
<b>AA Sequence</b>	MEEVSEYCSH MIGSGHLQSL QRLIDSQMET SCQITFEFVD QEQLKDPVCY LKKAFLLVQD IMEDTMRFRD NTPNAIAIVQ LQELSLRLKS CFTKDYEEHD KACVRTFYET PLQLLEKVKN VFNETKNLLD KDWNIFFSKNC NNSFAECSSQ GHERQSEGS

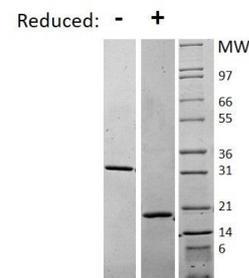
### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Induced proliferation of NFS-60 cells assay for Human MCSF. Cell proliferation was measured to calculate the ED50.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human MCSF has a predicted Mw of 37.1 kDa.