

Human M-CSF/CSF-1 Protein, Ultra Low Endotoxin



Cat. No. CSF-HM401-UL

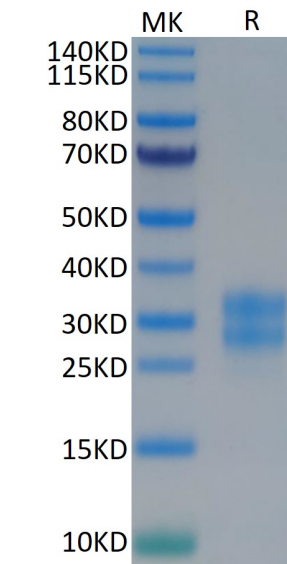
Description	
Source	Recombinant Human M-CSF/CSF-1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Glu33-Asn190.
Accession	P09603-1
Molecular Weight	The protein has a predicted MW of 21.3 kDa. Due to glycosylation, the protein migrates to 28-34 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background	
	CSF-1, also known as M-CSF , is a four alpha -helical-bundle cytokine that is the primary regulator of macrophage survival, proliferation and differentiation. CSF-1 is also essential for the survival and proliferation of osteoclast progenitors.CSF-1 is 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.

Assay Data

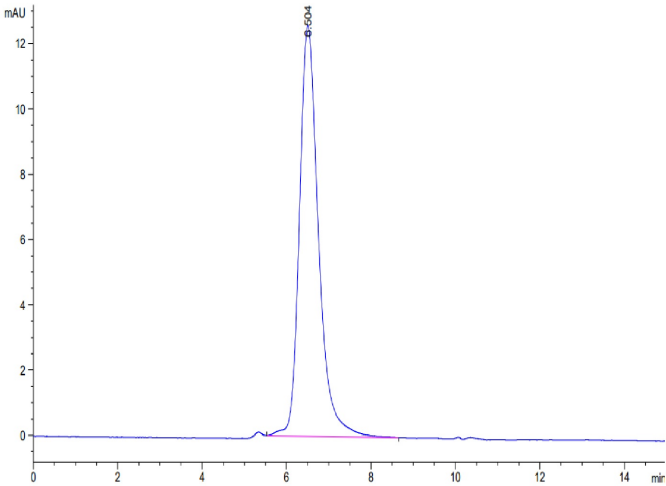
Bis-Tris PAGE



Human M-CSF on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

SEC-HPLC

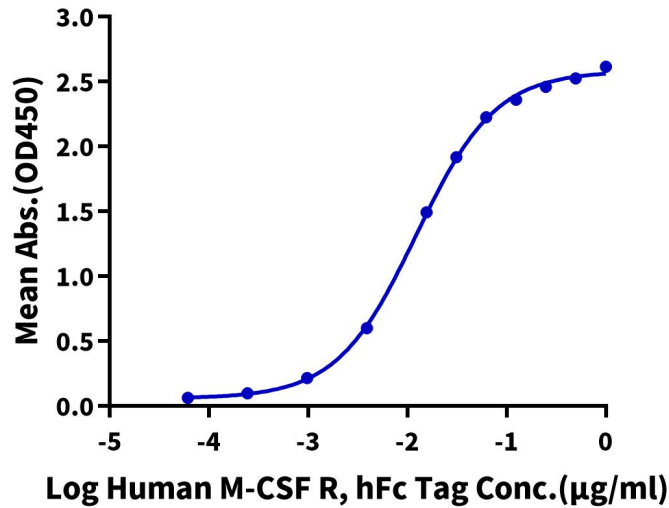
Assay Data



The purity of Human M-CSF is greater than 95% as determined by SEC-HPLC.

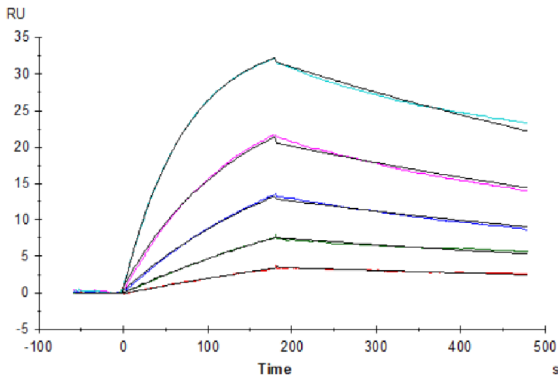
ELISA Data

Human M-CSF, His Tag ELISA
0.1µg Human M-CSF, His Tag Per Well



Immobilized Human M-CSF, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human M-CSF R, hFc Tag with the EC50 of 12.3ng/ml determined by ELISA (QC Test).

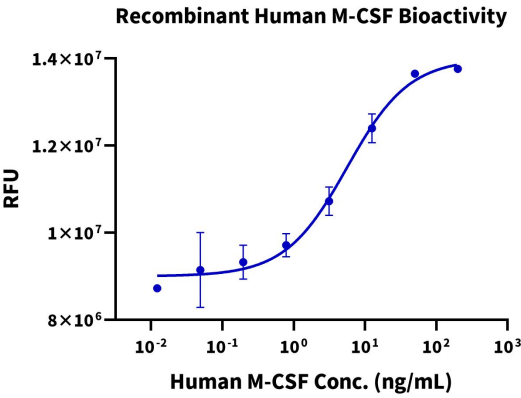
SPR Data



Human M-CSF, His Tag captured on CM5 Chip via Anti-his Antibody can bind Human M-CSF R, hFc Tag with an affinity constant of 0.24 nM as determined in SPR assay (Biacore T200).

Cell Based Assay

Assay Data



Measured in a cell proliferation assay using RAW264.7 cells. The ED50 for this effect is 2.5 - 7.0 ng/mL.