

Human M-CSF R/CSF1R/CD115 Protein

Cat. No. CSF-HM21R

Description

Source	Recombinant Human M-CSF R/CSF1R/CD115 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Ile20-Glu512.
Accession	P07333-1
Molecular Weight	The protein has a predicted MW of 81.3 kDa. Due to glycosylation, the protein migrates to 100-130 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

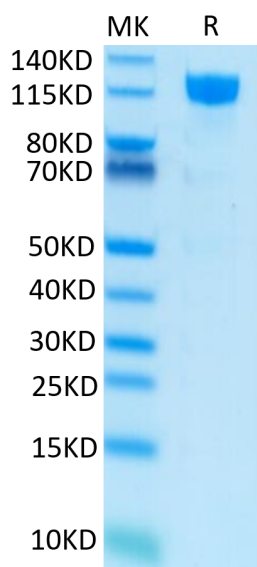
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
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

CSF1R also known as M-CSF receptor, the product of the c-fms proto-oncogene, is a member of the type III subfamily of receptor tyrosine kinases that also includes receptors for SCF and PDGF. These receptors each contain five immunoglobulin-like domains in their extracellular domain (ECD) and a split kinase domain in their intracellular region. CSF1R is tyrosine-protein kinase that acts as cell-surface receptor for CSF1 and IL34 and 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

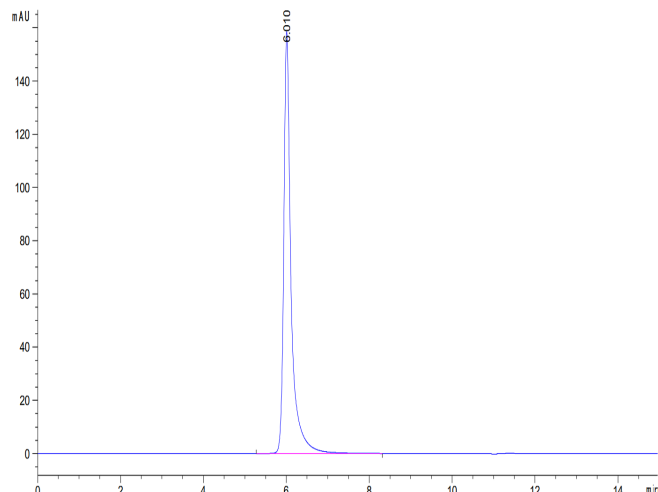
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

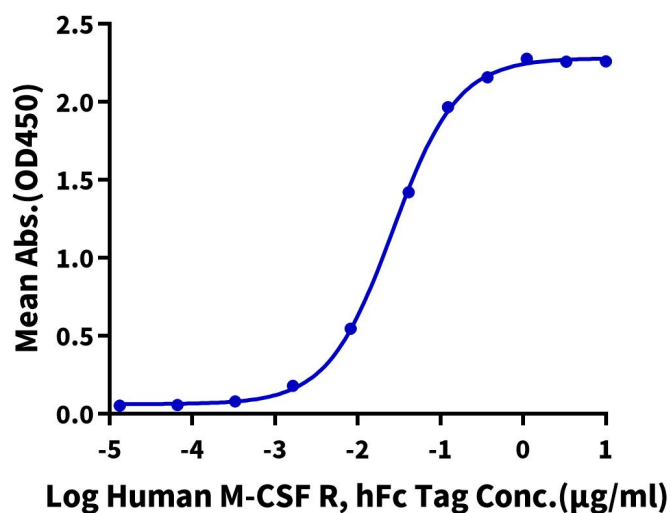


The purity of Human M-CSF R is greater than 95% as determined by SEC-HPLC.

ELISA Data

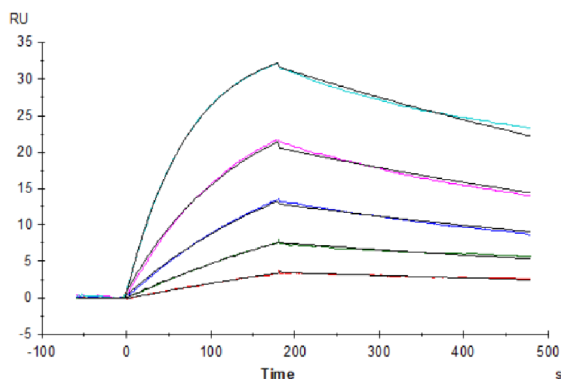
Human M-CSF R, hFc Tag ELISA

0.05µg Human M-CSF, His Tag Per Well



Immobilized Human M-CSF, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Human M-CSF R, hFc Tag with the EC50 of 26.3ng/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).