

# Biotinylated Human M-CSF R/CSF1R/CD115 Protein

Cat. No. CSF-HM41RB

Description	
Source	Recombinant Biotinylated Human M-CSF R/CSF1R/CD115 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ile20-Glu512.
Accession	P07333-1
Molecular Weight	The protein has a predicted MW of 57.4 kDa. Due to glycosylation, the protein migrates to 75-105 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 0.22µm 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 µg/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

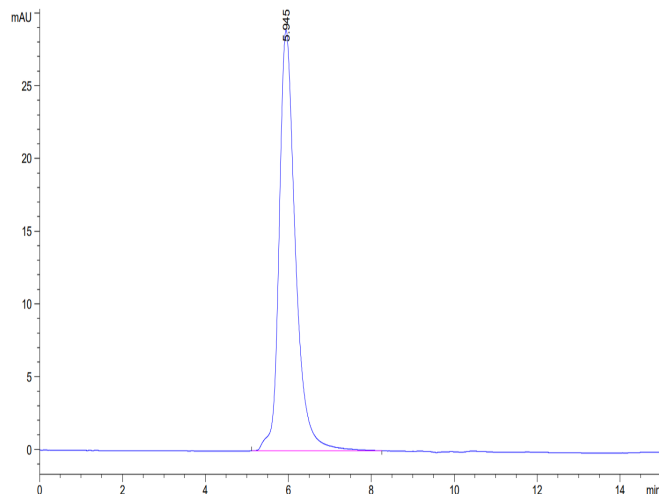
### Bis-Tris PAGE



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

### SEC-HPLC

**Assay Data**

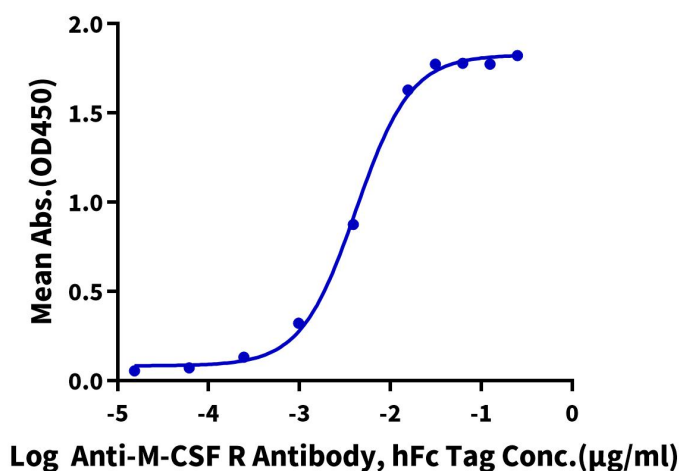


The purity of Biotinylated Human M-CSF R is greater than 95% as determined by SEC-HPLC.

**ELISA Data**

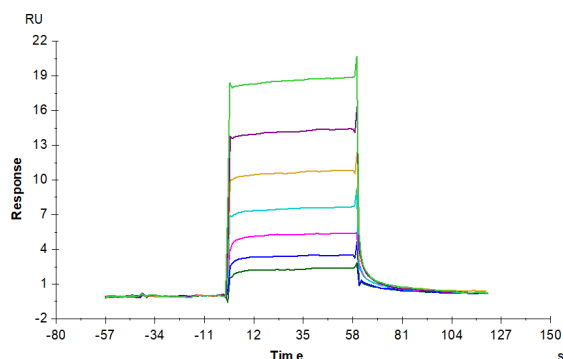
**Biotinylated Human M-CSF R, His Tag ELISA**

0.05µg Biotinylated Human M-CSF R, His Tag Per Well



Immobilized Biotinylated Human M-CSF R, His Tag at 0.5µg/ml(100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-M-CSF R Antibody, hFc Tag with the EC50 of 4.2ng/ml determined by ELISA (QC Test).

**SPR Data**



Biotinylated Human M-CSF R, His-Avi Tag immobilized on CM5 Chip can bind Human M-CSF, No Tag with an affinity constant of 0.81 µM as determined in SPR assay (Biacore T200).