

Synonym

CSF1R,C-FMS,CD115,CSFR,FIM2,FMS,M-CSFR

Source

Human M-CSF R Protein, Mouse IgG2a Fc Tag(CSR-H5255) is expressed from human 293 cells (HEK293). It contains AA Ile 20 - Glu 512 (Accession # [P07333-1](#)).

Predicted N-terminus: Ile 20

Molecular Characterization

M-CSF R(Ile 20 - Glu 512) P07333-1	mFc(Glu 98 - Lys 330) P01863
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This protein carries a mouse IgG2a Fc tag at the C-terminus.

The protein has a calculated MW of 81.4 kDa. The protein migrates as 105-120 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

Storage

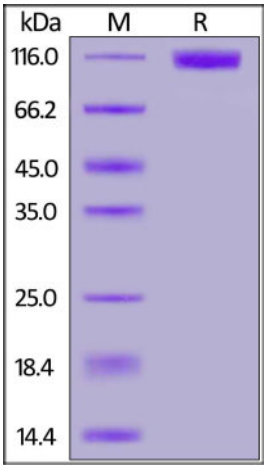
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

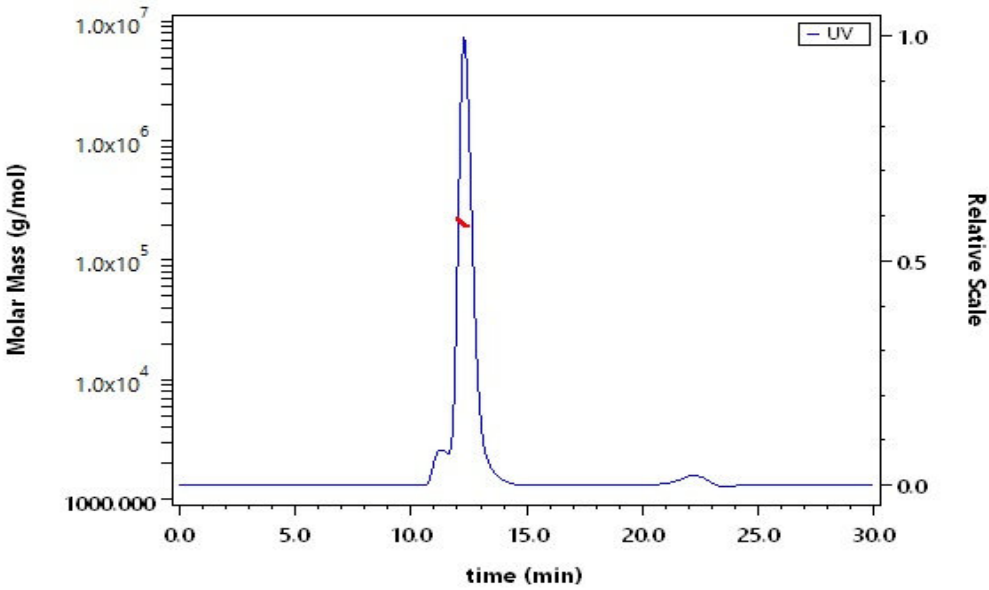
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human M-CSF R Protein, Mouse IgG2a Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

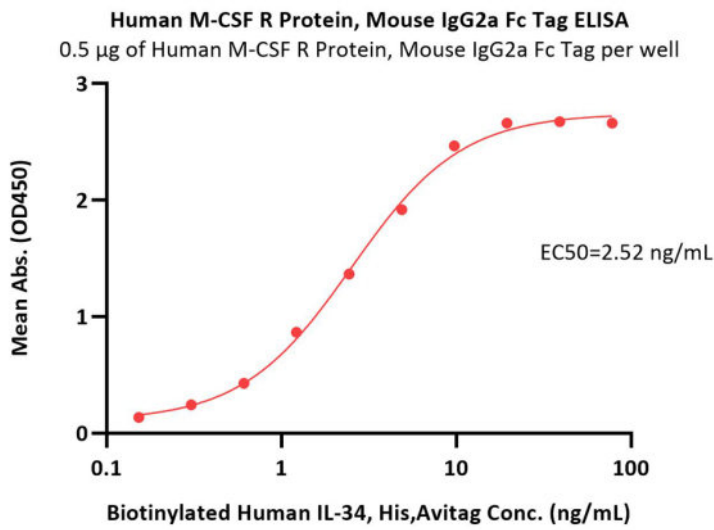
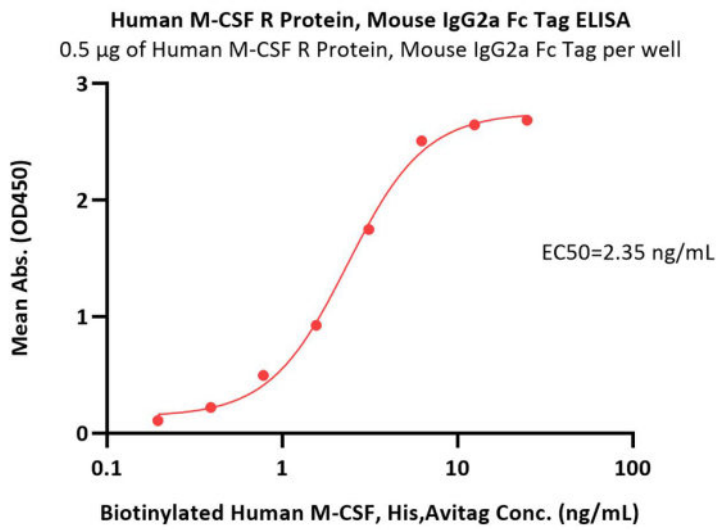


The purity of Human M-CSF R Protein, Mouse IgG2a Fc Tag (Cat. No. CSR-H5255) is more than 85% and the molecular weight of this protein is around 210-230 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-ELISA





Immobilized Human M-CSF R Protein, Mouse IgG2a Fc Tag (Cat. No. CSR-H5255) at 5 µg/mL (100 µL/well) can bind Biotinylated Human M-CSF Protein, His,Avitag (Cat. No. MCF-H82E6) with a linear range of 0.2-3 ng/mL (QC tested).

Immobilized Human M-CSF R Protein, Mouse IgG2a Fc Tag (Cat. No. CSR-H5255) at 5 µg/mL (100 µL/well) can bind Biotinylated Human IL-34 Protein, His,Avitag (Cat. No. IL4-H82E5) with a linear range of 0.2-10 ng/mL (Routinely tested).

Background

Colony stimulating factor 1 receptor (CSF1R) is also known as macrophage colony-stimulating factor receptor (M-CSFR), CD115 Cluster of Differentiation 115 (CD115), C-FMS, CSFR, FIM2, FMS, and is a member of the typeIII subfamily of receptor tyrosine kinases (RTKs). CSF1R is a receptor for a cytokine called colony stimulating factor 1, The protein encoded by the CSFR1 gene is the receptor for colony stimulating factor 1, a cytokine which controls the production, differentiation, and function of macrophages. This receptor mediates most, if not all, of the biological effects of this cytokine. Ligand binding activates CSFR1 through a process of oligomerization and transphosphorylation . Mutations in CSF1R are associated with chronic myelomonocytic leukemia and type M4 acute myeloblastic leukemia. Increased levels of CSF1R1 are found in microglia in Alzheimer's disease and after brain injuries. The increased receptor expression causes microglia to become more active. Both CSF1R, and its ligand colony stimulating factor 1 play an important role in the development of the mammary gland and may be involved in the process of mammary gland carcinogenesis.

