

**Synonym**

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

**Source**

Cynomolgus M-CSF R, Fc Tag(CSR-C5252) is expressed from human 293 cells (HEK293). It contains AA Ile 99 - Pro 596 (Accession # [G7P8P1](#) ).

Predicted N-terminus: Ile 99

**Molecular Characterization**

M-CSF R(Ile 99 - Pro 596) G7P8P1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 81.9 kDa. The protein migrates as 110-125 kDa under reducing (R) condition, and 200- 240 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 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.*

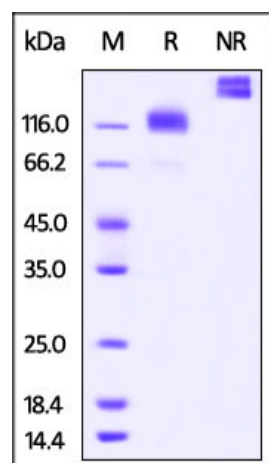
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

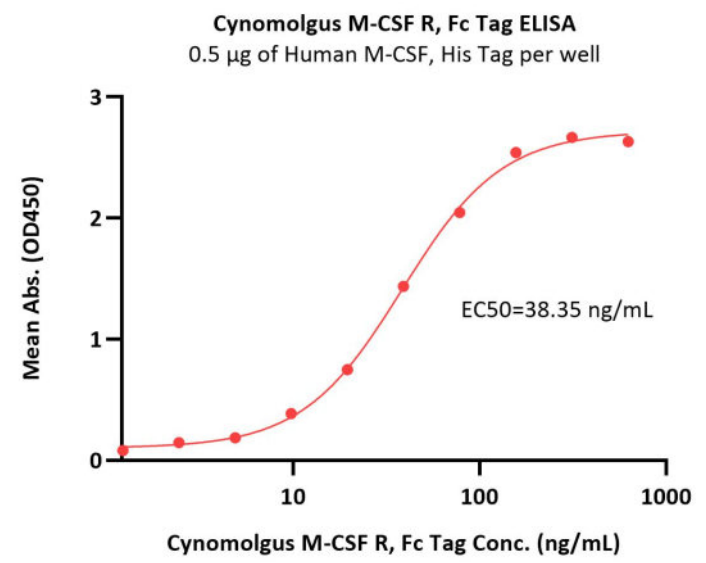
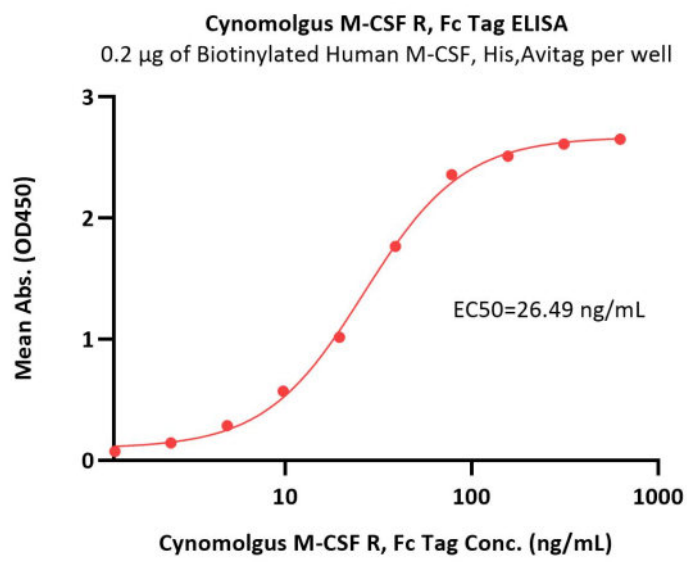
This product is stable after storage at:

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

**SDS-PAGE**

Cynomolgus M-CSF R, Fc Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized Biotinylated Human M-CSF, His,Avitag (Cat. No. MCF-H82E6) at 2 µg/mL (100 µL/well) on streptavidin precoated (0.2 µg/well) plate, can bind Cynomolgus M-CSF R, Fc Tag (Cat. No. CSR-C5252) with a linear range of 1-39 ng/mL (QC tested).

Immobilized Human M-CSF, His Tag (Cat. No. MCF-H5247) at 5 µg/mL (100 µL/well) can bind Cynomolgus M-CSF R, Fc Tag (Cat. No. CSR-C5252) with a linear range of 1-39 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.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.