

# Recombinant Human CSF1R protein, Fc-tagged, low endotoxin

Cat. No. CSF1R-470H Lot. No. (See product label)

## SPECIFICATION

**Product Overview** Recombinant Human CSF1R protein (Ile20-Glu512), fused to human IgG1 Fc tag at C-terminus, was expressed in human 293 cells (HEK293).

**Species** Human

**Source** HEK293

**ProteinLength** 493

### Description

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 type 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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |   |
|-----------------------|---|
| <b>Form</b>           | Lyophilized from 0.22 um filtered solution in PBS, pH7.4, 10% trehalose.  |
| <b>Molecular Mass</b> | The protein has a calculated MW of 80.7 kDa. The protein migrates as 100-150 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.  |
| <b>Endotoxin</b>      | Less than 0.1 EU per ug by the LAL method.  |
| <b>Purity</b>         | >95% as determined by SDS-PAGE.   |
| <b>Storage</b>        | <p>For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.</p> <p>Please avoid repeated freeze-thaw cycles.</p> <p>This product is stable after storage at:</p> <ul style="list-style-type: none"> <li>-20 centigrade to -70 centigrade for 12 months in lyophilized state;</li> <li>-70 centigrade for 3 months under sterile conditions after reconstitution.</li> </ul> |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.   |

## GENE INFORMATION

|                        |   |
|------------------------|---|
| <b>Gene Name</b>       | CSF1R   |
| <b>Official Symbol</b> | CSF1R   |
| <b>Synonyms</b>        | CSF1R; colony stimulating factor 1 receptor; FMS, McDonough feline sarcoma viral (v fms) oncogene homolog; macrophage colony-stimulating factor 1 receptor; C FMS; CD115; CSFR; CSF-1-R; CD115 antigen; CSF-1 receptor; FMS proto-oncogene; proto-oncogene c-Fms; macrophage colony stimulating factor I receptor; McDonough feline sarcoma viral (v-fms) oncogene homolog; FMS; FIM2; HDLS; C-FMS; CSF-1R; M-CSF-R |

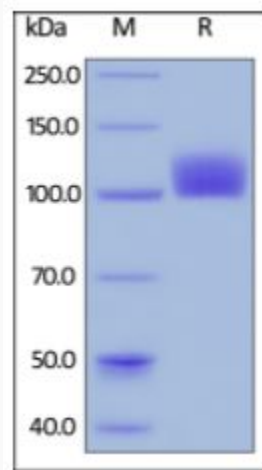
 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                       |           |
|-----------------------|-----------|
| <b>Gene ID</b>        | 1436      |
| <b>mRNA Refseq</b>    | NM_005211 |
| <b>Protein Refseq</b> | NP_005202 |
| <b>MIM</b>            | 164770    |
| <b>UniProt ID</b>     | P07333    |

**SDS-PAGE of  
CSF1R-470H**

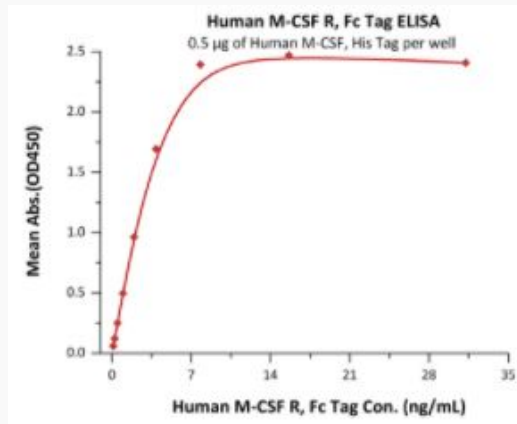


Human M-CSF R, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Bioactivity-ELISA of  
CSF1R-470H**

Immobilized Human M-CSF, His Tag at 5 µg/mL (100 µL/well) can bind Human M-CSF R, Fc Tag, low endotoxin with a linear range of 0.1-4 ng/mL (QC tested).

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA