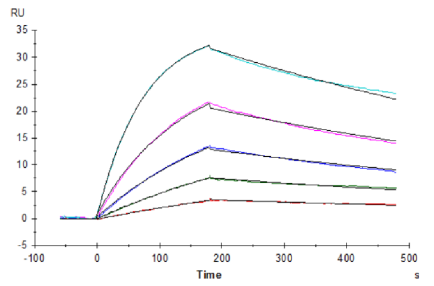
Bioactive CellTx™ HuPro®

# CSF1R (Human) Recombinant Protein

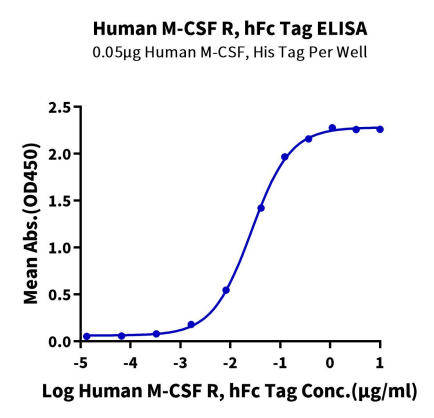
Catalog # P9995 Size 100 ug

## Applications



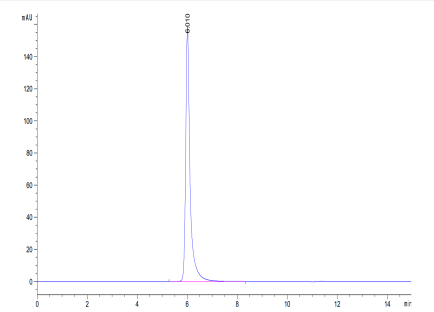

### Surface Plasmon Resonance

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).




### ELISA

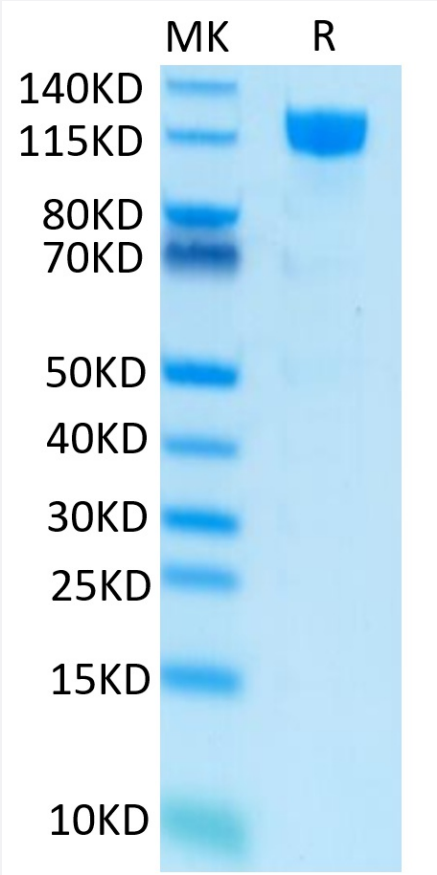
Immobilized Human M-CSF, His Tag at 0.5ug/ml (100ul/well) on the plate. Dose response curve for Human M-CSF R, hFc Tag with the $EC_{50}$ of 26.3ng/ml determined by ELISA.



### SEC-HPLC

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

Copyright © 2023 Abnova Corporation. All Rights Reserved.




## Tris-Bis PAGE

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

## Specification

| | |
|---|---|
| **Product Description** | Human CSF1R (P07333-1, Ile20-Glu512) partial recombinant protein with hFc tag at C-terminus expressed in HEK293 cells. |
| **Sequence** | Ile20-Glu512 |
| **Host** | Human |
| **Theoretical MW (kDa)** | 81.3 kDa<br>Due to g |
| **Form** | Lyophilized |
| **Preparation Method** | Mammalian cell (HEK293) expression system |
| **Purity** | > 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC |
| **Endotoxin Level** | < 1 EU per 1 ug of protein (determined by LAL method) |

Copyright © 2023 Abnova Corporation. All Rights Reserved.

| | |
|---|---|
| **Quality Control Testing** | ELISA, SEC-HPLC and Tris-Bis PAGE<br>ELISA<br>Immobilized Human M-CSF, His Tag at 0.5ug/ml (100ul/well) on the plate. Dose response curve for Human M-CSF R, hFc Tag with the $EC_{50}$ of 26.3ng/ml determined by ELISA.<br>SEC-HPLC<br>The purity of Human M-CSF R is greater than 95% as determined by SEC-HPLC.<br>Tris-Bis PAGE<br>Human M-CSF R on Tris-Bis PAGE under reduced condition. The purity is greater than 95%. |
| **Recommend Usage** | Biological Activity<br>ELISA<br>SPR<br>Tris-Bis PAGE<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | Lyophilized from filtered solution in PBS, pH 7.4 (5% trehalose). |
| **Storage Instruction** | After reconstitution with deionized water to a final concentration more than 100 ug/ml, store at 4°C for 1 week. For long term storage, store at -80°C for 1 year.<br>Aliquot to avoid repeated freezing and thawing. |

## Applications

- Functional Study
- Surface Plasmon Resonance

  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).

## Gene Info — CSF1R

| | |
|---|---|
| **Entrez GeneID** | 1436 |
| **Protein Accession#** | P07333-1 |
| **Gene Name** | CSF1R |
| **Gene Alias** | C-FMS, CD115, CSFR, FIM2, FMS |
| **Gene Description** | colony stimulating factor 1 receptor |
| **Omim ID** | 164770 |
| **Gene Ontology** | Hyperlink |

Copyright © 2023 Abnova Corporation. All Rights Reserved.

| | |
|---|---|
| **Gene Summary** | The protein encoded by this 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 the receptor kinase through a process of oligomerization and transphosphorylation. The encoded protein is a tyrosine kinase transmembrane receptor and member of the CSF1/PDGF receptor family of tyrosine-protein kinases. Mutations in this gene have been associated with a predisposition to myeloid malignancy. The first intron of this gene contains a transcriptionally inactive ribosomal protein L7 processed pseudogene oriented in the opposite direction. [provided by RefSeq |
| **Other Designations** | CD115 antigen\|FMS proto-oncogene\|McDonough feline sarcoma viral (v-fms) oncogene homolog \|macrophage colony stimulating factor I receptor\|soluble CSF1R variant 1 |

## Pathway

- Cytokine-cytokine receptor interaction
- Endocytosis
- Hematopoietic cell lineage
- Pathways in cancer

## Disease

- Asthma
- Genetic Predisposition to Disease
- Heart Defects
- Lung Neoplasms
- Myelodysplastic Syndromes
- Pancreatic cancer
- Pancreatic Neoplasms
- Pulmonary Disease
- Purpura
- Tobacco Use Disorder
- Urinary Bladder Neoplasms
- Werner syndrome

Copyright © 2023 Abnova Corporation. All Rights Reserved.