Recombinant Human CSF1R/M-CSF R/CD115 Protein

Catalog No.: RP00268

Sequence Information

Species
Human

Gene ID
1436

Swiss Prot
P07333

Tags
C-His

Synonyms
CSF1R,C-FMS,CD115,CSF-1R, CSFR,FIM2,FMS,HDLS,M-CSF-R, BANDDOS

Product Information

Source
HEK293 cells

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
55.34 kDa

Observed MW
70-100 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

The recombinant human CSF1R/GST chimera consists of 667 amino acids with a molecular weight of 76 KDa. It migrates as an about 75 KDa band in SDS-PAGE under reducing conditions.M-CSFR encoded by the proto-oncogene c-fms is the receptor for colony stimulating factor 1 (CSF1R), a cytokine involved in the proliferation, differentiation, and activation of macrophages.This cell surface glycoprotein is consisted by an extracellular ligand-binding domain, a single membrane-spanning segment, and an intracellular tyrosine kinase domain. 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 role of CSF1 and CSF1R in normal and neoplastic mammary development that may elucidate potential relationships of growth factor-induced biological changes in the breast during pregnancy and tumor progression.

Basic Information

Description
Recombinant Human CSF1R/M-CSF R/CD115 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ile20-Glu512) of human CSF1R (Accession #NP_005202.2) fused with a 6×His tag at the C-terminus.

Activity
1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human M-CSF at 2 μg/mL (100 μL/well) can bind Recombinant Human CSF1R with a linear range of 50-200 ng/mL.
2.Measured by its ability to inhibit the GCSF-induced proliferation of M-NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED_{50} for this ettect is typically 0.095-0.38 ng/mL.
3.Measured by its binding ability in a functional ELISA.Immobilized Human CSF-1/M-CSF(Cat. RP01221) at 2μg/mL (100 μL/well) can bind Human CSF1R with a linear range of 2-185 ng/mL.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

Operational Notes

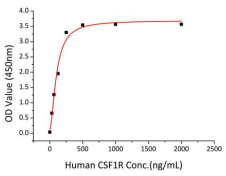
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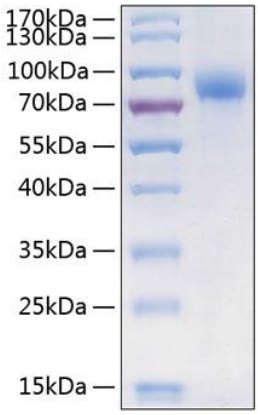
For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

For your safety and health, please wear a lab coat and disposable gloves for handling.

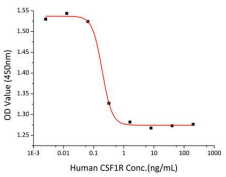
Validation Data



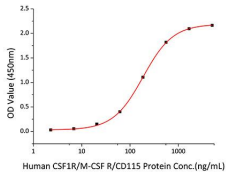
Immobilized Recombinant Human M-CSF at 2μg/mL (100 μL/well) can bind Recombinant Human CSF1R with a linear range of 50-200 ng/mL.



Recombinant Human CSF1R/M-CSF R/CD115 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human CSF1R inhibits the GCSF-induced proliferation of M-NFS-60 mouse myelogenous leukemia lymphoblast cells. The ED_{50} for this ettect is typically 0.095-0.38 ng/mL.



Immobilized Human CSF-1/M-CSF(Cat. RP01221) at 2μg/mL (100 μL/well) can bind Human CSF1R with a linear range of 2-185 ng/mL.