Human G-CSFR/CD114 recombinant protein

Catalog Number	503541
Species	Human
Expression System	Human Cells
Accession	Q99062
Gene ID	1441
Molecular Weight	The mature recombinant human G-CSFR consists of 63 amino acids and predicts a molecular mass of 69.0 KDa. As a result of glycosylation, the apparent molecular mass of rhG-CSFR is approximately 94 KDa in SDS-PAGE under reducing conditions.

Product Information

Sequence Region	Met 1 - Pro 621
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4 1. 5 % trehalose and mannitol are added as protectants before lyophilization. 2. Please contact us for any concerns or special requirements.
Purity	> 85 % as determined by SDS-PAGE
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method
Activity	Measured by its ability to inhibit the GCSF-induced proliferation of NFS60 mouse myeloid cells. The ED_{50} for this effect is typically 2-8 μg/mL.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Predicted N-terminal	Glu 25
Protein Construction	The mature form of human G-CSF receptor (NP_000751.1) extracellular domain (Met 1-Pro 621) with five aminio acids at the C-terminus was expressed and purified.

Storage & Handling

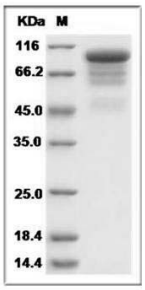
Reconstitution	Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Granulocyte Colony Stimulating Factor Receptor (G-CSFR), also known as CD114, which belongs to the cytokine receptor superfamily, is a cell surface receptor for colony stimulating factor 3 (CSF3). It is a critical regulator of granulopoiesis. This type I membrane protein has a composite structure consisting of an immunoglobulin(Ig)-like domain, a cytokine receptor-homologous (CRH) domain and three fibronectin type III (FNIII) domains in the extracellular region. Mutations in the G-CSF receptor leading to carboxy-terminal truncation transduce hyperproliferative growth responses, and are implicated in the pathological progression of severe congenital neutropenia (SCN) to acute myelogenous leukemia (AML). Additionally, autocrine/paracrine stimulation of G-CSFR may be important in the biology of solid tumors, including metastasis.

Validation

SDS-PAGE



Human G-CSFR / CD114 / CSF3R Protein SDS-PAGE