

Human CellExp GCSFR /CD114, human recombinant protein
CSF3R, CD114, GCSFR
Catalog # PBV11101r**Specification**

Human CellExp GCSFR /CD114, human recombinant protein - Product infoPrimary Accession
Calculated MW[O99062](#)

This protein is fused with 6×his tag at the N-terminus, has a calculated MW of 69 kDa expressed. The predicted N-terminus is Glu 25. Protein migrates as 94 kDa in reduced SDS-PAGE resulting from glycosylation. KDa

Human CellExp GCSFR /CD114, human recombinant protein - Additional InfoGene ID
Gene Symbol
Other Names
CSF3R, CD114, GCSFR**1441**
GCSFRGene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Results

Human
HEK293 cells
SDS-PAGE; ≥95%
N/A;
Yes
Measured by its ability to inhibit the GCSF-induced proliferation of NFS-60 mouse myeloid cells. The ED50 for this effect is typically 0.02-2 µg /ml in the presence of 0.125 ng /ml of recombinant human GCSF.

Target/Specificity
GCSFR /CD114**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format
Lyophilized**Storage**

-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp GCSFR /CD114, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp GCSFR /CD114, human recombinant protein - Images

Human CellExp GCSFR /CD114, human recombinant protein - Background

Granulocyte Colony Stimulating Factor Receptor (G-CSFR), also known as Cluster of Differentiation 114 (CD114), CSF3R and GCSF, is a cell-surface receptor for the granulocyte colony-stimulating factor (G-CSF), a cytokine that plays a critical role in the regulation of the activation, proliferation, differentiation, and survival of the neutrophilic granulocyte lineage. G-CSFR belongs to a family of cytokine receptors known as the hematopoietin receptor family. 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 I?II (FNIII) domains in the extracellular region. G-CSFR is present mainly on precursor cells in the bone marrow, and, in response to stimulation by G-CSF, initiates cell proliferation and differentiation into mature neutrophilic granulocytes and macrophages. G-CSFR mediates the specific effect of GCSF through activating a variety of intracellular signaling cascades, including the Jak/Stat, PI3/Akt, Ras-Raf-MAP kinase, and Src family kinase pathways, and thus functions in defense against infection, inflammation and repair, and in the maintenance of steady state hematopoiesis. Mutations in this gene are a cause of Kostmann syndrome, also known as severe congenital neutropenia. Mutations in the intracellular part of this receptor are also associated with certain types of leukemia.

Human CellExp GCSFR /CD114, human recombinant protein - References

Larsen A.,et al.J. Exp. Med. 172:1559-1570(1990).
Fukunaga R.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:8702-8706(1990).
Seto Y.,et al.J. Immunol. 148:259-266(1992).
Haniu M.,et al.Arch. Biochem. Biophys. 324:344-356(1995).
Fukunaga R.,et al.EMBO J. 10:2855-2865(1991).