



Recombinant Protein Technical Manual
Recombinant Human G-CSFR/CD114 Protein (Active)
RPES0111

Product Data:

Product SKU: RPES0111

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000751.1

Protein Information:

Molecular Mass: 69.0 kDa

AP Molecular Mass: 94 kDa

Tag:

Bio-activity: Measured by its ability to inhibit GCSF-induced proliferation of NFS60 mouse myeloid cells. The ED50 for this effect is typically 2-8 µg/mL.

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CD114;CSF3R;G-CSF R;GCSFR

Immunogen Information:

Sequence: Met 1-Pro 621

Background:

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.