

G-CSFR/CD114 Protein, Human (HEK293)

Cat. No.:	HY-P75692
Synonyms:	Granulocyte colony-stimulating factor receptor; G-CSF-R; CD114; CSF3R; GCSFR
Species:	Human
Source:	HEK293
Accession:	Q99062/NP_000751.1 (E25-P621)
Gene ID:	1441
Molecular Weight:	Approximately 85.36 kDa

PROPERTIES

AA Sequence	<pre> ECGHISVSAP IVHLGDPITA SCIIKQNC SH LDPEPQILWR LGAELQPGGR QQR LSDGTQE SIITLPHLNH TQAF LSCCLN WGN SLQILDQ VELRAGYPPA IPHNLSCLMN LTTSSLICQW EPGPETHLPT SFTLKSFKSR GNCQTQGDSI LDCVPKDGQS HCCI PRKHL L LYQNMGIWVQ AENALGTSMS PQLCLDPM DV VKLEPPMLRT MDP SPEAAP QAGCLQLCWE PWQPGLHINQ KCELRHKPQR GEASWALVGP LPLEALQYEL CGLLPATAYT LQIRCI RWPL PGHWS DWSPS LELRTTERAP TVRLDTWWRQ RQLDPR TVQL FWKPVPLEED SGRIQGYVVS WRPSGQAGAI LPLCNTTELS CTFHLPSEAQ EVALVAYNSA GTSRPTPVVF SESRGPALTR LHAMARDPHS LWVGWEP PNP WPQGYVIEWG LGPPSASNSN KTW RMEQNGR ATGFLLKENI RPFQLYE IIV TPLYQDTMGP SQHVYAYSQE MAPSHAPELH LKHIGKTWAQ LEWVPEPPEL GKSPLTHYTI FWTNAQNQSF SAILNASSRG FVLHGLEPAS LYHIHLMAAS QAGATNSTVL TLM TLT P </pre>
Biological Activity	Measured by its ability to inhibit the G-CSF-induced proliferation of M-NFS60 cells. The ED ₅₀ for this effect is 1.299 µg/mL in the presence of 0.125 ng/mL of recombinant human G-CSF, corresponding to a specific activity is 769.82 units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

G-CSFR/CD114, the receptor for granulocyte colony-stimulating factor (CSF3), holds a pivotal role in orchestrating granulocytic maturation by governing the proliferation, differentiation, and survival of cells along the neutrophilic lineage. This homodimeric receptor engages with two CSF3 molecules, forming a crucial interaction that regulates essential cellular processes. Beyond its involvement in cellular maturation, G-CSFR/CD114 may contribute to adhesion or recognition events at the cell surface. Furthermore, its interaction with CEACAM1 serves as a regulatory axis, down-regulating the CSF3R-STAT3 pathway by recruiting PTPN6, which subsequently dephosphorylates CSF3R and modulates cellular signaling dynamics.

Caution: Product has not been fully validated for medical applications. For research use only.

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