

G-CSFR/CD114 Protein, Human (HEK293, Fc)

Cat. No.:	HY-P72634
Synonyms:	Granulocyte colony-stimulating factor receptor; G-CSF-R; CD114; CSF3R; GCSFR
Species:	Human
Source:	HEK293
Accession:	Q99062 (E25-H627)
Gene ID:	1441
Molecular Weight:	Approximately 110.17 kDa

PROPERTIES

AA Sequence	<pre> E C G H I S V S A P I V H L G D P I T A S C I I K Q N C S H L D P E P Q I L W R L G A E L Q P G G R Q Q R L S D G T Q E S I I T L P H L N H T Q A F L S C C L N W G N S L Q I L D Q V E L R A G Y P P A I P H N L S C L M N L T T S S L I C Q W E P G P E T H L P T S F T L K S F K S R G N C Q T Q G D S I L D C V P K D G Q S H C C I P R K H L L L Y Q N M G I W V Q A E N A L G T S M S P Q L C L D P M D V V K L E P P M L R T M D P S P E A A P P Q A G C L Q L C W E P W Q P G L H I N Q K C E L R H K P Q R G E A S W A L V G P L P L E A L Q Y E L C G L L P A T A Y T L Q I R C I R W P L P G H W S D W S P S L E L R T T E R A P T V R L D T W W R Q R Q L D P R T V Q L F W K P V P L E E D S G R I Q G Y V V S W R P S G Q A G A I L P L C N T T E L S C T F H L P S E A Q E V A L V A Y N S A G T S R P T P V V F S E S R G P A L T R L H A M A R D P H S L W V G W E P P N P W P Q G Y V I E W G L G P P S A S N S N K T W R M E Q N G R A T G F L L K E N I R P F Q L Y E I I V T P L Y Q D T M G P S Q H V Y A Y S Q E M A P S H A P E L H L K H I G K T W A Q L E W V P E P P E L G K S P L T H Y T I F W T N A Q N Q S F S A I L N A S S R G F V L H G L E P A S L Y H I H L M A A S Q A G A T N S T V L T L M T L T P E G S E L H </pre>
Biological Activity	Measured in a cell proliferation assay using M-NFS-60 cells. The ED ₅₀ this effect is 0.9517 µg/mL, corresponding to a specific activity is 1.05×10 ³ units/mg in the presence of 0.125 ng/mL of recombinant human G-CSF.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4 or 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. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA