

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

Cat. No.:	HY-P75694
Synonyms:	Granulocyte colony-stimulating factor receptor; G-CSF-R; CD114; CSF3R; GCSFR
Species:	Human
Source:	HEK293
Accession:	Q99062-1 (E25-H627)
Gene ID:	1441
Molecular Weight:	90-110 kDa

PROPERTIES

AA Sequence

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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
  
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Biological Activity Immobilized Human G-CSF R, His Tag at 1 µg/mL (100 µl/well) on the plate. Dose response curve for Human G-CSF, hFc Tag with the EC₅₀ of ≤ 6.0 ng/mL determined by ELISA.

Appearance Lyophilized powder

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.

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 ddH₂O.

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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