

Human G-CSF ELISA Kit | CSF3 elisa kit

Human G-CSF Quick ELISA Kit

CATALOG #
AAA125851

REACTIVITY
Human

PRODUCT SYNONYMS

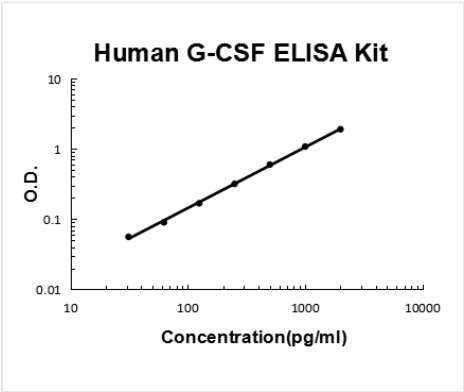
G-CSF; Human G-CSF Quick ELISA Kit; CSF3; C17orf33; GCSF; Granulocyte colony-stimulating factor; Pluripoietin; Filgrastim; Lenograstim; colony stimulating factor 3; CSF3 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human CSF3
Assay Type	Colorimetric sandwich
Samples	cell culture supernatants, serum and plasma (heparin, EDTA, citrate)
Detection Range	31.2pg/ml-2,000pg/ml
Sensitivity	<4pg/ml
Capture/Detection Antibodies	Capture antibody- monoclonal antibody from mouse Detection antibody- polyclonal antibody from goat
Sample Data	Concentration(pg/ml) 0 31.2 62.5 125 250 500 1000 2000 O.D. 0.002 0.058 0.092 0.170 0.319 0.599 1.080 1.902
Intra-Assay Precision	Sample 1 2 3 n 16 16 16 Mean(pg/ml) 65 240 981 Standard deviation 3.96 14.88 43.16 CV(%) 6.1% 6.2% 4.4%
Inter-Assay Precision	Sample 1 2 3 n 24 24 24 Mean(pg/ml) 67 233 946 Standard deviation 5.15 18.17 61.49 CV(%) 7.7% 7.8% 6.5%
Reproducibility	To assay reproducibility, three samples with differing target protein concentrations were assayed using four different lots. Lots: Lot 1 (pg/ml) Lot 2 (pg/ml) Lot 3 (pg/ml) Lot 4 (pg/ml) Mean (pg/ml) Standard Deviation CV (%) Sample 1: 65 55 63 58 60 2.52 4.2% Sample 2: 240 210 242 227 229 11.45 5% Sample 3: 981 965 892 988 956 43.02 4.5% *number of samples for each test n=16.
Cross Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen	Expression system for standard: E Coli; Immunogen sequence: T31-P204
Anticoagulant	heparin, EDTA or citrate
Benefits	The Quick ELISA kits, assay takes less than 1.5 hours. Detect Human G-CSF with <4pg/ml sensitivity. Format: 96-well plate with removable strips. This is a TMB colorimetric sandwich ELISA kit with short assay time and quick experiment set up.

Principle	Human CSF3 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human CSF3 with a 96-well strip plate that is pre-coated with mouse monoclonal antibody specific for CSF3. The detection antibody is a HRP linked goat polyclonal antibody specific for CSF3. The kit contains recombinant Human CSF3 with immunogen: Expression system for standard: E Coli; Immunogen sequence: T31-P204. The kit is analytically validated with ready to use reagents. To measure Human CSF3, add standards and samples to the wells, then add HRP linked detection antibody. Wash the wells with PBS or TBS buffer, and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human CSF3 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human CSF3 in the sample.
Assay Procedure Step 1	2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.25pg/ml
TMB Incubation Time	15
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles. (Shipped with wet ice.)

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for CSF3 elisa kit	Granulocyte colony-stimulating factor(G-CSF) is a member of the CSF family of hormone-like glycoprotein that regulates hematopoietic cell proliferation and differentiation, and it almost exclusively stimulates the colony formation of granulocytes from committed precursor cells in semi-solid agar culture. G-CSF is also termed colony stimulating factor-3, and a single gene of which codes for a 177 or 180 amino acid mature protein of molecular weight 19,600. Functionally, it specifically stimulates the proliferation and differentiation of the progenitor cells for granulocytes. The effect of G-CSF on myeloid leukemias is unique among colony stimulating factors in driving the leukemic cells from a self-renewing malignant state to a mature differentiated phenotype with the concomitant loss of tumorigenicity. Besides, it also prevents cardiac remodeling after myocardial infarction by activating the Jak-Stat pathway in cardiomyocytes. The recombinant form of hG-CSF is capable of supporting neutrophil proliferation in a CFU-GM assay as well as early erythroid colonies and mixed colony formation. Human gene coding for G-CSF is assigned to the q21-q22 region of chromosome 17. The standard product used in this kit is recombinant human G-CSF, consisting of 175 amino acids with the molecular mass of 18. 8KDa.
Product Categories/Family for CSF3 elisa kit	ELISA kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	296011057
NCBI GeneID	1440
NCBI Accession #	NP_001171618.1

NCBI GenBank Nucleotide #	NM_001178147.1
UniProt Accession #	P09919 ; A8MXR7
Molecular Weight	22,293 Da
NCBI Official Full Name	granulocyte colony-stimulating factor isoform d
NCBI Official Synonym Full Names	colony stimulating factor 3 (granulocyte)
NCBI Official Symbol	CSF3
NCBI Official Synonym Symbols	GCSF; CSF3OS; C17orf33
NCBI Protein Information	granulocyte colony-stimulating factor; filgrastim; lenograstim; pluripoietin
UniProt Protein Name	Granulocyte colony-stimulating factor
UniProt Gene Name	CSF3
UniProt Synonym Gene Names	C17orf33; GCSF; G-CSF
UniProt Entry Name	CSF3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/csf3-human-elisa-kits/g-csf/125851>