

Datasheet for KOA0178**Human G-CSF ELISA Kit****Overview**

Description:	Human G-CSF AccuSignal ELISA Kit - KOA0178
Item No.:	KOA0178
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	31.2 pg/ml - 2000 pg/ml

Product Details

Background:	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.
Synonyms:	C17orf33, Colony stimulating factor 3 (granulocyte), CSF 3, CSF beta, CSF3, CSF3OS,, Csfg, Filgrastim, GCSA, GCSF, Granulocyte colony stimulating fact, Lenograstim, Macrophage granulocyte inducer 2, MGC45931, MGI 2, MGI IG, OTTMUSP00000006785, Pluripoietin, RP23-395E10.4
Detection Kit Type:	ELISA Kit
Detection Range:	31.2 pg/ml - 2000 pg/ml
Sensitivity:	<4 pg/ml

Target Details

Gene Name:	CSF3
Reactivity:	Human
Immunogen:	Expression system for standard: E.coli; Immunogen sequence: T31-P204
Purity/Specificity:	Natural and recombinant human G-CSF. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P09919 • NCBI - NP_000750.1 • GeneID - 1440 • KOA0178 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml human G-CSF standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernates, serum or plasma (heparin, EDTA, citrate) to each empty well. It is recommended that each human G-CSF standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Formulation

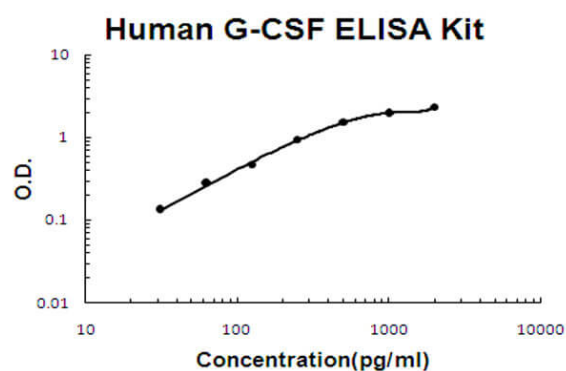
Anticoagulant:	Heparin Sodium
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Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

Expiration: See kit insert for complete instructions.

Images



ELISA

Human G-CSF AccuSignal ELISA Kit standard curve. Assay Range: 31.2pg/ml-2000pg/ml. Sensitivity: <4pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.