

Datasheet for KOA0182**Human GM-CSF ELISA Kit****Overview**

Description:	Human GM-CSF AccuSignal ELISA Kit - KOA0182
Item No.:	KOA0182
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	15.6 pg/ml - 1000 pg/ml

Product Details**Background:**

Granulocyte-macrophage colony-stimulating factor(GM-CSF) is also symbolized CSF2. Human GM-CSF is a glycoprotein that is essential for the in vitro proliferation and differentiation of precursor cells into mature granulocytes and macrophages. The human cDNA clones contain a single open-reading frame encoding a protein of 144 amino acids with a predicted molecular mass of 16,293 daltons and show 69% nucleotide homology and 54% amino acid homology to mouse GM-CSF. The gene for human GM-CSF appears to exist as a single-copy gene. Human GM-CSF is a 22,000-dalton glycoprotein that stimulates the growth of myeloid progenitor cells and acts directly on mature neutrophils. The GM-CSF gene is localized by somatic cell hybrid analysis and in situ hybridization to human chromosome region 5q21-5q32, which is involved in interstitial deletions in the 5q- syndrome and acute myelogenous leukemia. A complementary DNA for the T lymphocyte-derived lymphokine, GM-CSF has been cloned, and recombinant GM-CSF protein has been expressed in yeast and purified to homogeneity. This purified human recombinant GM-CSF stimulates peripheral blood monocytes in vitro to become cytotoxic for the malignant melanoma cell line A419.

Synonyms:

Colony stimulating factor, Colony stimulating factor 2 (granulocyte macrophage), CSF, CSF 2, CSF2, GMCSF, Granulocyte macrophage colony stimulating factor, MGC141935, MGC138897, Molgramostin, Sargramostim

Detection Kit Type:

ELISA Kit

Detection Range:

15.6 pg/ml - 1000 pg/ml

Sensitivity:

<1 pg/ml

Target Details

Gene Name:	CSF2
Reactivity:	Human
Immunogen:	Expression system for standard: E.coli; Immunogen sequence: A18-E144
Purity/Specificity:	Natural and recombinant human GM-CSF. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P04141 • NCBI - NP_000749.2 • GeneID - 1437 • KOA0182 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml, 15.6pg/ml human GM-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 GM-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.

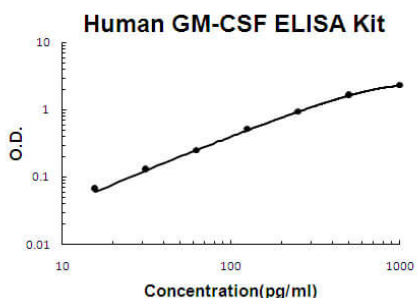
Formulation

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 GM-CSF AccuSignal ELISA Kit standard curve. Assay Range: 15.6pg/ml-1000pg/ml. Sensitivity: <1pg/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.