

Mouse GM-CSF/CSF2 ELISA Kit | GM-CSF/CSF2 elisa kit

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CATALOG #
AAA258493

REACTIVITY
Mouse

PRODUCT SYNONYMS

GM-CSF/CSF2; Mouse GM-CSF/CSF2 ELISA Kit; GM-CSF ELISA Kit; Mouse; colony stimulating factor 2 (granulocyte-macrophage); Csfgm ELISA Kit; Gm-CSF ELISA Kit; GMCSF ELISA Kit; MGI-IGM ELISA Kit; GM-CSF/CSF2 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Mouse
Specificity	For the quantitative determination of Mouse GM-CSF/CSF2 concentration in serum and cell culture supernates.
Assay Type	Solid Phase Sandwich ELISA (quantitative)
Sample Types	Serum, Cell supernatant
Detection Range	1.88-120pg/mL
Sensitivity	0.83pg/mL
Conjugation	HRP
Interference	Preparations of the factors listed below at 50ng/mL in a mid-range recombinant mouse GM-CSF control were assayed for interference. No significant interference was observed.
Materials Provided	1. 96 well microplate coated with Capture Antibody 2. Detection Antibody conjugated to HRP 3. Standards 4. Wash Buffer Concentrate 5. Dilution Buffer Concentrate 6. Color Reagent A 7. Color Reagent B 8. Stop Solution

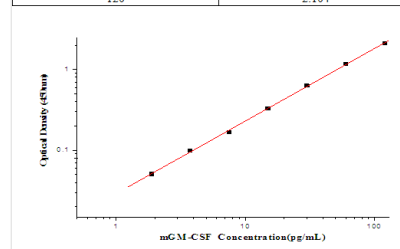
IMAGES

Recombinant human			
GCSFB	GM-CSF	CSF1	
Recombinant mouse			
IL1A	IL1B	IL2	IL3
IL4	IL5	IL6	IL10
IL13	LIF	CCL3	CXCL2
KITL	TNF- α		

Application Data

This assay recognizes both recombinant and natural mouse GM-CSF. The factors listed below were prepared at 50ng/mL in dilution buffer and assayed for cross-reactivity. No cross-reactivity was observed.

Concentration (pg/mL)	Zero standard subtracted OD
0	0
1.88	0.051
3.75	0.100
7.5	0.167
15	0.331
30	0.631
60	1.174
120	2.104



Standard Curve (Sample)

This standard curve is only for demonstration purposes. A standard curve should be generated for each assay.

ADDITIONAL INFORMATION

Related Product Information for GM-CSF/CSF2 elisa kit	This GM-CSF ELISA Kit, Mouse is an enzyme-linked immunosorbent assay for the quantitative measurement of Mouse GM-CSF protein in Serum, Cell supernatant. It contains recombinant Mouse GM-CSF, and antibodies raised against the recombinant protein. This ELISA kit is complete and ready-to-use. Background: Granulocyte-macrophage colony-stimulating factor (GM-CSF) is one of an array of cytokines with pivotal roles in embryo implantation and subsequent development. Several cell lineages in the reproductive tract and gestational tissues synthesise GM-CSF under direction by ovarian steroid hormones and signalling agents originating in male seminal fluid and the conceptus. The pre-implantation embryo, invading placental trophoblast cells and the abundant populations of leukocytes controlling maternal immune tolerance are all subject to GM-CSF regulation. GM-CSF stimulates the differentiation of hematopoietic progenitors to monocytes and neutrophils, and reduces the risk for febrile neutropenia in cancer patients. GM-CSF also has been shown to induce the differentiation of myeloid dendritic cells (DCs) that promote the development of T-helper type 1 (cellular) immune responses in cognate T cells. The active form of the protein is found extracellularly as a homodimer, and the encoding gene is localized to a related gene cluster at chromosome region 5q31 which is known to be associated with 5q-syndrome and acute myelogenous leukemia. As a part of the immune/inflammatory cascade, GM-CSF promotes Th1 biased immune response, angiogenesis, allergic inflammation, and the development of autoimmunity, and thus worthy of consideration for therapeutic target. GM-CSF has been utilized in the clinical management of multiple disease processes. Most recently, GM-CSF has been incorporated into the treatment of malignancies as a sole therapy, as well as a vaccine adjuvant. While the benefits of GM-CSF in this arena have been promising, recent reports have suggested the potential for GM-CSF to induce immune suppression and, thus, negatively impact outcomes in the management of cancer patients. GM-CSF deficiency in pregnancy adversely impacts fetal and placental development, as well as progeny viability and growth after birth, highlighting this cytokine as a central maternal determinant of pregnancy outcome with clinical relevance in human fertility.
References	Robertson SA. (2007) GM-CSF regulation of embryo development and pregnancy. Cytokine Growth Factor Rev. 18(3-4): 287-98. Waller EK. (2007) The role of sargramostim (rhGM-CSF) as immunotherapy. Oncologist. 12 Suppl 2: 22-6. Clive KS, et al. (2010) Use of GM-CSF as an adjuvant with cancer vaccines: beneficial or detrimental. Expert Rev Vaccines. 9(5): 519-25.

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.