

Datasheet for ABIN4986887

GM-CSF ELISA Kit[Go to Product page](#)**1** Image

Overview

Quantity:	96 tests
Target:	GM-CSF (CSF2)
Reactivity:	Rat
Method Type:	Sandwich ELISA
Detection Range:	0.02-1.0 ng/mL
Minimum Detection Limit:	0.02 ng/mL
Application:	ELISA

Product Details

Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (citrate), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Natural and recombinant Rat GM-CSF Ligand
Sensitivity:	7 pg/mL
Material not included:	<ul style="list-style-type: none">• Microplate reader.• Pipettes and pipette tips.• EP tube Deionized or distilled water.

Target Details

Target:	GM-CSF (CSF2)
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Target Details

Alternative Name: GM-CSF ([CSF2 Products](#))

Background: GM-CSF was initially characterized as a factor that can support the in vitro colony formation of granulocytemacrophage progenitors. It is also a growth factor for erythroid, megakaryocyte, and eosinophil progenitors. GM-CSF is produced by a number of different cell types (including T cells, B cells, macrophages, mast cells, endothelial cells, fibroblasts, and adipocytes) in response to cytokine or inflammatory stimuli. On mature hematopoietic cells, GM-CSF is a survival factor for and activates the effector functions of granulocytes, monocytes/macrophages, and eosinophils (1, 2). GM-CSF promotes a Th1 biased immune response, angiogenesis, allergic inflammation, and the development of autoimmunity (3-5). It shows clinical effectiveness in ameliorating chemotherapy-induced neutropenia, and GM-CSF transfected tumor cells are utilized as cancer vaccines (6, 7). The 22 kDa glycosylated GM-CSF, similar to IL-3 and IL-5, is a cytokine with a core of four bundled α helices (8-10). Mature rat GM-CSF shares 56-69 % amino acid sequence identity with canine, feline, human, mouse, and porcine GM-CSF. GM-CSF exerts its biological effects through a heterodimeric receptor complex composed of GM-CSF R α /CD116 and the signal transducing common β chain (CD131) which is also a component of the high affinity receptors for IL-3 and IL-5 (11, 12). In addition, GM-CSF binds a naturally occurring soluble form of GM-CSF R α (13). Rat GM-CSF is active on mouse cells, although mouse GM-CSF is only weakly active on rat cells (14, 15).

Pathways: [JAK-STAT Signaling](#), [Cellular Response to Molecule of Bacterial Origin](#)

Application Details

Application Notes: Detection Wavelength: 450 nm

Sample Volume: 20 μ L

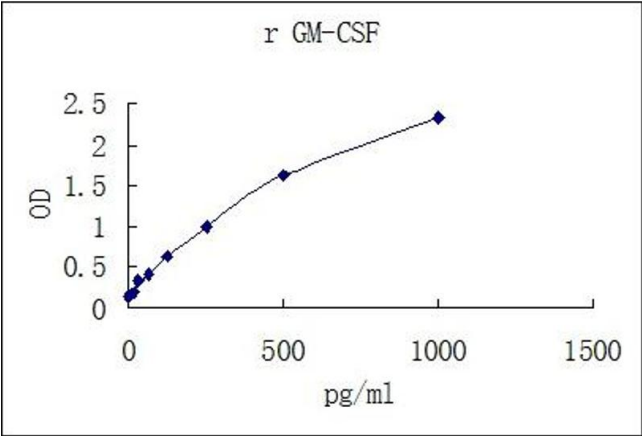
Assay Time: 3 h

Plate: Pre-coated

Restrictions: For Research Use only

Handling

Storage: 4 °C



ELISA

Image 1.