



Mouse anti Human CSF2(G-CSF) monoclonal antibody, clone 4427 (CABT-L178)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Captures human G-CSF in sandwich ELISAs. In this format, no cross-reactivity or interference was observed with recombinant human(rh) GM-CSF, rmGM-CSF, rhM-CSF, or rmM-CSF. This antibody cross-reacts with recombinant mouse G-CSF at concentrations greater than 50 ng/mL.
Target	G-CSF
Immunogen	E. coli-derived recombinant human G-CSF, Ala30-Pro204, Accession #NP_757373
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	4427
Purification	Protein A or G purified from hybridoma culture supernatant
Conjugate	Unconjugated
Applications	ELISA(Cap)
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Format	Lyophilized; Small package size(SP): Liquid
Size	100 µg, 500 µg
Buffer	PBS with Trehalose
Preservative	None

Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.
Ship	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

BACKGROUND

Introduction	G-CSF is a pleiotropic cytokine best known for its specific effects on the proliferation, differentiation, and activation of hematopoietic cells of the neutrophilic granulocyte lineage. It is produced mainly by monocytes and macrophages upon activation by endotoxin, TNF-alpha and IFN-gamma. Other cell types including fibroblasts, endothelial cells, astrocytes and bone marrow stromal cells can also secrete G-CSF after LPS, IL-1, or TNF-alpha activation. In addition, various carcinoma cell lines and myeloblastic leukemia cells can express G-CSF constitutively. In humans, two distinct cDNA clones for G-CSF, encoding 207 and 204 amino acid precursor proteins, have been isolated. Both proteins have a 30 amino acid signal peptide and have identical amino acid sequences except for a three amino acid insertion (deletion) at the 35th amino acid residue from the N-terminus of the mature protein. Human G-CSF is 73% identical at the amino acid level to murine G-CSF and the two proteins show species cross-reactivity. In vitro, G-CSF stimulates growth, differentiation and functions of cells from the neutrophil lineage. It also has blast cell growth factor activity and can synergize with IL-3 to shorten the Go period of early hematopoietic progenitors. Consistent with its in vitro functions, G-CSF has been found to play important roles in defense against infection, in inflammation and repair, and in the maintenance of steady state hematopoiesis.
Keywords	C17orf33;chromosome 17 open reading frame 33;colony stimulating factor 3 (granulocyte);CSF3;CSF3OS;Filgrastim;GCSF;G-CSF;GCSFlenograstim;granulocyte colony-stimulating factor;Lenograstim;MGC45931;pluripoietin

GENE INFORMATION

Entrez Gene ID	1440
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