



Anti-mouse GM-CSF



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	103-PA06
Size:	200 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>95%) recombinant mouse GM-CSF (Ala18-Lys141) derived from E. coli.

Target Background

Synonyms:	Granulocyte-macrophage colony-stimulating factor, Colony-stimulating factor
------------------	---

GM-CSF was initially characterized as a factor that can support the *in vitro* colony formation of granulocyte-macrophage 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. GM-CSF promotes a Th1 biased immune response, angiogenesis, allergic inflammation, and the development of autoimmunity.

The 22 kDa glycosylated GM-CSF, similar to IL3 and IL5, is a cytokine with a core of four bundled α-helices. GM-CSF exerts its biological effects through a heterodimeric receptor complex composed of GM-CSF Rα/CD116 and the signal transducing common β chain (CD131) which is also a component of the high affinity receptors for IL3 and IL5. In addition, GM-CSF binds a naturally occurring soluble form of GM-CSF Rα. The activity of GM-CSF is species specific between human and mouse. Mouse GM-CSF is only weakly active on rat cells, although rat GM-CSF is fully active on mouse cells.

References

- Martinez-Moczygemba and Huston (2003) J. Allergy Clin Immunol 112:653
- Barreda et al, (2004) Dev Comp Immunol 28:509
- Eksioglu et al, (2007) Exp Hematol 35:1163
- Cao Y, (2007) J Clin Invest 117:2362
- Fleetwood et al, (2005) Crit Rev Immunol 25:405
- Diederichs et al, (1991) Science 254:1779
- Gough et al, (1984) Nature 309:763.

Database References Antigen

Protein RefSeq:	NP_034099.2
Uniprot ID:	P01587
mRNA RefSeq:	NM_009969.4

Product Specifications

Species reactivity	mouse
Clone/Ab feature	Rabbit IgG
Cross reactivity	ND
Host	rabbit
Clonality	polyclonal
Purification	Protein A purified
Immunogen	Recombinant mouse GM-CSF (RT #M30-013)
Formulation	lyophilized
Buffer	PBS

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Western Blot: Use 2-5 µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



Anti-mouse GM-CSF

Handling/Applications

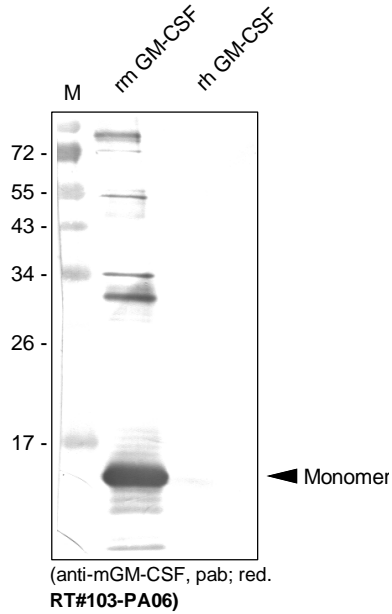


Figure 1. Western Analysis of anti-mouse GM-CSF. Samples were loaded in 15% SDS-polyacrylamide gel under reducing conditions. Lane 1: MWM (kDa); lane 2: rm GM-CSF; lane 3: rh GM-CSF.