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Product Data Sheet

Purified anti-human GM-CSF

Catalog # / Size: 502301 / 50 µg
502302 / 500 µg

Clone: BVD2-21C11

Isotype: Rat IgG2a, κ

Immunogen: *E. coli*-expressed, recombinant human GM-CSF.

Reactivity: Human, **Cross-Reactivity:** Cynomolgus, Rhesus

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C.

Applications:

Applications: ICFC - *Quality tested*
IHC, IP, WB - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.5 µg per 10^6 cells in 100 µl volume. The purified BVD2-21C11 has been tested by blocking fluorochrome conjugated BVD2-21C11 for intracellular cytokine staining. In order to obtain complete blocking results, a saturated amount of purified antibody (≤ 5.0 ug/million cells) should be used for incubation with target cells, prior to staining with fluorochrome conjugated antibody. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: **ELISA[1-4] or ELISPOT[3,4] Detection:** The biotinylated BVD2-21C11 antibody is useful as a detection antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the purified BVD2-23B6 antibody (Cat. No. 502202/502204) as the capture antibody.
Flow Cytometry: The fluorochrome-labeled BVD2-21C11 is useful for intracellular immnunofluorescent staining and flow cytometric analysis to identify GM-CSF-producing cells within mixed cell populations.
Neutralization: The BVD2-21C11 antibody can neutralize the bioactivity of natural or recombinant GM-CSF[1].
Additional reported applications (for the relevant formats) include: immunoprecipitation[1], Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections[5,6], and immunocytochemistry.
Note: For testing human GM-CSF in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 432001 to 432006) are specially developed and recommended.

Application References:
1. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5.
2. Abrams J, *et al.* 1994. *Eosinophils in Allergy and Inflammation*. Marcel Dekker New York. p.133.
3. Bacchetta R, *et al.* 1990. *J. Immunol.* 144:902.
4. Kita H, *et al.* 1991. *J. Exp. Med.* 174:745.
5. Andersson U, *et al.* 1999. *Detection and quantification of gene expression*. New York:Springer-Verlag.
6. Andersson J, *et al.* 1994. *Immunology* 83:16.

Description: Granulocyte/macrophage - colony stimulating factor (GM-CSF) is a hematopoietic factor that is produced by activated T cells, B cells, mast cells, macrophages, fibroblasts, and endothelial cells. In addition to supporting colony formation of granulocyte/macrophage progenitors, GM-CSF is a growth factor for erythroid, megakaryocyte, and eosinophil progenitors.

Antigen References:
1. Fitzgerald K, *et al.* Eds. 2001. The Cytokine FactsBook. Academic Press San Diego.
2. Demetri G, *et al.* 1991. *Blood* 78:2791.
3. Fan D, *et al.* 1991. *In vivo* 5:571.
4. Negrin R, *et al.* 1992. *Adv. Pharmacol.* 23:263.

Related Products:

Product	Clone	Application
Purified anti-human GM-CSF	BVD2-23B6	ELISA Capture, IP, WB

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