

Ultra-LEAF™ Purified anti-human GM-CSF Antibody

Catalog# / Size	502205 / 100 µg 502206 / 1 mg 502207 / 5 mg 502208 / 25 mg 502209 / 50 mg 502210 / 100 mg
Clone	BVD2-23B6
Regulatory Status	RUO
Other Names	Granulocyte/macrophage colony-stimulating factor, CSF-α, Pluripoietin-α, Eosinophil colony stimulating factor (Eo-CSF), Burst promoting activity (BPA)
Isotype	Rat IgG2a, κ
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.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	<i>E. coli</i> -expressed, recombinant human GM-CSF
Formulation	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is < 0.01 EU/µg of the protein (< 0.001 ng/µg of the protein) as determined by the LAL test.
Preparation	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
Concentration	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	ELISA Capture - Quality tested ELISPOT Capture, Neut, IP, WB - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by ELISA assay . For ELISA capture applications, a concentration range of 0.25 - 1.0µg/mL is recommended. To obtain a linear standard curve, serial dilutions of GM-CSF recombinant protein ranging from 500 to 4 pg/mL are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	ELISA or ELISPOT Capture¹⁻⁶: The Purified BVD2-23B6 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated BVD2-21C11 antibody (Cat. No. 502304) as the detecting antibody. The Ultra-LEAF™ Purified antibody is suggested for ELISPOT capture. Neutralization¹⁻⁴: The Ultra-LEAF™ Purified antibody (Endotoxin <0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of human GM-CSF bioactivity (Cat. Nos. 502205 - 502210). Additional reported applications (for the relevant formats) include: immunoprecipitation ³ and Western blotting. Note: For testing human GM-CSF in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. Nos. 432001 and 432004) are specially developed and recommended.

Application References

(PubMed link indicates BioLegend citation)

1. Bacchetta R, *et al.* 1990. *J. Immunol.* 144:902.
2. Kita H, *et al.* 1991. *J. Exp. Med.* 174:745.
3. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5.
4. Abrams J, *et al.* 1994. *Eosinophils in Allergy and Inflammation.* Marcel Dekker New York. p.133.
5. Mahanty S, *et al.* 1992. *J. Immunol.* 148:3567.
6. Klinman D, *et al.* 1994. *Curr. Prot. Immunol.* John Wiley and Sons New York. Unit 6.19.

RRID

AB_2832790 (BioLegend Cat. No. 502205)
AB_2861032 (BioLegend Cat. No. 502206)
AB_2832791 (BioLegend Cat. No. 502207)
AB_2832792 (BioLegend Cat. No. 502208)
AB_2832793 (BioLegend Cat. No. 502209)
AB_2832794 (BioLegend Cat. No. 502210)

Antigen Details

Structure	Cytokine; 22 kD (Mammalian)
Bioactivity	Growth/development granulocyte/macrophage progenitors; differentiates myeloblasts/monoblasts; synergizes with Epo proliferation of erythroid/megakaryocytic progenitors
Cell Sources	T cells, macrophages, fibroblasts, endothelial cells, mast cells
Cell Targets	Granulocyte/macrophage/erythroid/megakaryocytic progenitors, myeloblasts, monoblasts
Receptors	Heterodimer GM-CSFR α subunit (CDw116); β -subunit (CDw131) which is also shared the IL-3 and IL-5 receptor α chains
Biology Area	Cell Biology, Stem Cells
Molecular Family	Cytokines/Chemokines, Growth Factors
Antigen References	1. Fitzgerald K, <i>et al.</i> Eds. 2001. The Cytokine FactsBook. Academic Press San Diego. 2. Demetri G, <i>et al.</i> 1991. <i>Blood</i> 78:2791. 3. Fan D, <i>et al.</i> 1991. <i>In vivo</i> 5:571. 4. Negrin R, <i>et al.</i> 1992. <i>Adv. Pharmacol.</i> 23:263.
Regulation	Synergistic with IL-1, IL-3, G-CSF; E21R competitive antagonist for receptor binding; stored in ECM with heparan sulfate proteoglycans
Gene ID	1437

Related Protocols

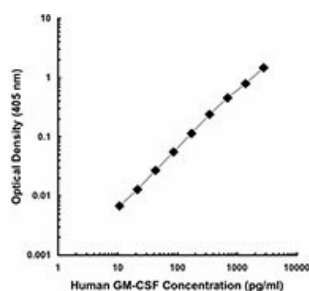
[Active Protocols: Sandwich ELISA - Video](#)

[Sandwich ELISA Protocol](#)

Other Formats

Purified anti-human GM-CSF, Ultra-LEAF™ Purified anti-human GM-CSF

Product Data



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