



Rat Anti-Human GM-CSF

Cat. No.	Form	Quantity
10111-01	Purified (UNLB) Antibody	0.5 mg
10111-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg

DESCRIPTION

CLONE	BVD2-23B6
IMMUNOGEN	<i>E. coli</i> -expressed human GM-CSF
ISOTYPE	Rat IgG _{2a} K
SPECIFICITY	Human granulocyte/macrophage – colony stimulating factor (GM-CSF) ¹⁻⁴ (This is a neutralizing antibody)

RESEARCH APPLICATIONS

ELISA Capture: Purified BVD2-23B6 monoclonal antibody is the preferred capture antibody in a sandwich ELISA for quantifying human GM-CSF protein levels.¹⁻⁴ Purified BVD2-23B6 antibody should be paired with biotinylated BVD2-21C11 antibody (Cat. No. 10112-08) as the detection antibody, with purified recombinant human GM-CSF as the standard.

Immunoprecipitation / Western Blotting: The purified BVD2-23B6 antibody is also useful for immunoprecipitation and Western blotting applications. For Western blotting, a concentration of 1-5 µg/mL (in conjunction with AP-labeled Goat Anti-Rat-Ig, Cat. No. 3010-04) has been found to enable detection of ≤ 100 ng/lane of recombinant human GM-CSF under reducing conditions.

Neutralization: The LE/AF form of BVD2-23B6 can be used for neutralizing human GM-CSF bioactivity. A suitable LE/AF Rat IgG_{2a} (Cat. No. 0117-14) should be used as an isotype control.

Since applications vary, each investigator should determine the optimal concentration appropriate for individual applications.

CHARACTERIZATION

To ensure acceptable performance, each batch of product is tested in a sandwich ELISA to conform to characteristics of a standard reference reagent.

HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- Protect conjugated forms from light. Aliquot and freeze the low endotoxin, azide-free product at -20°C immediately upon receipt. Each reagent is stable for the period shown on the bottle label if stored as directed.

REFERENCES

1. Bacchetta, R., T. de Wall Malefyt, H. Yssel, J.S. Abrams, J.E. de Vries, H. Spits, and M.G. Roncarolo. 1990. *J. Immunol.* 144:902.
2. Kita, H., T. Ohnishi, Y. Okubo, D. Weller, J.S. Abrams, and G.J. Gleich. 1991. *J. Exp. Med.* 174:745.
3. Abrams, J.S., M.-G. Roncarolo, H. Yssel, U. Andersson, G.J. Gleich, and J.E., Silver. 1992. *Immunol. Rev.* 127:5.
4. Abrams, J., J. Silver, R. van Dyke, and G. Gleich. 1994. Eosinophil-active cytokines in human disease: Development and use of monoclonal antibodies to IL-3-, IL-5, GM-CSF. In *Eosinophils in Allergy and Inflammation* (A. Kay and G. Gleich, eds). Marcel Dekker, New York, pp. 133.

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