## **Technical Data Sheet**

# Purified NA/LE Rat Anti-Mouse GM-CSF

#### **Product Information**

 Material Number:
 554403

 Size:
 0.5 mg

 Concentration:
 1.0 mg/ml

 Clone:
 MP1-22E9

Immunogen: Recombinant mouse GM-CSF

Isotype: Rat IgG2a

**Reactivity:** QC Testing: Mouse

Storage Buffer: No azide/low endotoxin: Aqueous buffered solution containing no preservative,

 $0.2\mu m$  sterile filtered. Endotoxin level is  $\leq 0.01 \text{ EU/}\mu g$  ( $\leq 0.001 \text{ ng/}\mu g$ ) of

protein as determined by the LAL assay.

#### Description

The MP1-22E9 antibody reacts with mouse granulocyte/macrophage-colony stimulating factor (GM-CSF). The immunogen used to generate the MP1-22E9 hybridoma was yeast-expressed recombinant mouse GM-CSF. This is a neutralizing antibody.

## **Preparation and Storage**

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

## **Application Notes**

#### Application

ELISA Routinely Tested	
Neutralization	Tested During Development
Intracellular staining (flow cytometry)	Tested During Development

#### **Neutralization Activity:**

This antibody has been reported to be useful for the neutralization of recombinant mouse GM-CSF. Neutralization activity may be measured with a proliferation assay using 125 pg/mL recombinant mouse GM-CSF (Cat. No. 554586) to stimulate MC/9 cells at  $5x10^4$  cells/mL as indicator cells (i.e. preincubation of the antibody with recombinant mouse GM-CSF for 60 minutes).

50% Neutralization (ND50) at 0.2 - 2.1 μg/mL

 $\geq$  90% Neutralization at 7 - 21 µg/mL

## **Recommended Assay Procedure:**

*ELISA*: Purified Rat Anti-Mouse GM-CSF antibody (Clone MP1-22E9, Cat. No. 554403 or 554404) can be useful as a capture antibody for sandwich ELISA for measuring mouse GM-CSF protein levels. Purified Rat Anti-Mouse GM-CSF can be paired with Biotin Rat Anti-Mouse GM-CSF (Cat. No. 554407, clone MP1-31G6) as the detection antibody, with recombinant mouse GM-CSF protein (Cat. No. 554586) as the standard. For testing mouse GM-CSF in complex biological fluids, such as serum or plasma, investigators are highly encouraged to use the BD OptEIA<sup>TM</sup> Mouse GM-CSF ELISA Set (Cat. No. 555167).

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
554586	Recombinant Mouse GM-CSF	10 μg	(none)
555167	Mouse GM-CSF ELISA Set	20 plates	(none)
554687	Purified NA/LE Rat IgG2a κ Isotype Control	0.5 mg	R35-95

#### **Product Notices**

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

#### References

Nabel G, Fresno M, Chessman A, Cantor H. Use of cloned populations of mouse lymphocytes to analyze cellular differentiation. *Cell.* 1981; 23(1):19-28. (Biology) Nozaki S, Abrams JS, Pearce MK, Sauder DN. Augmentation of granulocyte/macrophage colony-stimulating factor expression by ultraviolet irradiation is mediated by interleukin 1 in Pam 212 keratinocytes. *J Invest Dermatol.* 1991 July; 97(1):10-14. (Biology)

Sander B, Hoiden I, Andersson U, Moller E, Abrams JS. Similar frequencies and kinetics of cytokine producing cells in murine peripheral blood and spleen. Cytokine detection by immunoassay and intracellular immunostaining. *J Immunol Methods*. 1993; 166(2):201-214. (Biology)

Suda T, O'Garra A, MacNeil I, Fischer M, Bond MW, Zlotnik A. Identification of a novel thymocyte growth-promoting factor derived from B cell lymphomas. *Cell Immunol.* 1990; 129(1):228-240. (Biology)

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