

Technical Data Sheet

Biotin Rat Anti-Mouse GM-CSF

Product Information

Material Number:	554407
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	MP1-31G6
Immunogen:	Recombinant mouse GM-CSF
Isotype:	Rat IgG1
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The MP1-31G6 antibody reacts with mouse granulocyte/macrophage-colony stimulating factor (GM-CSF). The immunogen used to generate this hybridoma was recombinant mouse GM-CSF. This is a neutralizing antibody

Preparation and Storage

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

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

ELISA Detection	Routinely Tested
Immunoprecipitation	Reported

Recommended Assay Procedure:

ELISA Detection: The biotinylated MP1-31G6 antibody (Cat. No. 554407) is useful as a detection antibody for a sandwich ELISA for measuring mouse GM-CSF protein levels. Biotinylated MP1-31G6 antibody can be paired with the purified MP1-22E9 antibody (Cat. No. 554404) as the capture antibody, with recombinant mouse GM-CSF (Cat. No. 554586) as the standard. This detecting antibody should be titrated from 0.5 -2.0 µg/ml to determine its optimal concentration for ELISA detection. To obtain linear standard curves, doubling dilutions of mouse GM-CSF protein ranging from ~2,000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, please visit our web site, www.bdbiosciences.com, and go to the protocols section or the chapter on ELISA in the Immune Function Handbook.

Note 1: This ELISA pair shows no cross-reactivity with any of the cytokines tested (e.g., mouseIL-1β, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-10, IL-12 p70, IL-15, IFN-γ, MCP-1, TCA-3, TNF; human IL-1α, IL-1β, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL10, IL-11, IL-12 p70, IL-12 p40, IL-13, IL-15, G-CSF, GM-CSF, IFN-γ, lymphotactin, MCP-1, MCP-2, MIP-1α, MIP-1β, NT-3, PDGF-AA, sCD23, SCF, TNF, LT-α, VEGF; rat IL-2, IL-4, IL-6, IL-10, GM-CSF, IFN-γ, TNF).

Note 2: For measuring cytokine in plasma or serum our BD OptEIA™ mouse GM-CSF ELISA Set, Cat. No. 555167 is specially formulated and recommended.

IP/WB: The MP1-31G6 antibody has been reported to be useful for immunoprecipitation studies. Please note that this application is not routinely tested at BD Biosciences Pharmingen.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554404	Purified Rat Anti-Mouse GM-CSF	0.5 mg	MP1-22E9
554586	GM-CSF Recombinant Mouse	10 µg	(none)
555167	Mouse GM-CSF ELISA Set	20 tests	(none)

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

- Abrams J. Immunoenzymetric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. In: Coligan J, Kruisbeek A, Margulies D, Shevach E, Strober W, ed. *Current Protocols in Immunology*. New York: John Wiley and Sons; 1995:6.20-6.21.(Clone-specific: ELISA)
- Abrams JS, Roncarolo MG, Yssel H, Andersson U, Gleich GJ, Silver JE. Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. *Immunol Rev*. 1992; 127:5-24.(Clone-specific: ELISA, Immunoprecipitation)
- 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.(Clone-specific: ELISA)
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- 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.(Clone-specific)