

Technical Data Sheet

Purified NA/LE Rat Anti-Mouse IFN- γ

Product Information

Material Number:	554408
Alternate Name:	IFN- γ ; IFN-g; IFN-gamma; Interferon gamma; Type II Interferon
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	XMG1.2
Immunogen:	Mouse IFN- γ Recombinant Protein
Isotype:	Rat IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing protein stabilizer, no preservative, 0.2 μ m sterile filtered. Endotoxin level is \leq 0.01 EU/ μ g (\leq 0.001 ng/ μ g) of protein as determined by the LAL assay.

Description

The XMG1.2 monoclonal antibody specifically binds to mouse interferon- γ (IFN- γ) protein. IFN- γ is a pleiotropic cytokine, of approximately 15-17 kDa, involved in the regulation of inflammatory and immune responses. It plays an important role in activation, growth, and differentiation of T and B lymphocytes, macrophages, NK cells and other non-hematopoietic cell types. IFN- γ production is associated with the Th1 cell differentiation. The purified form of this antibody has been reported to be 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 mouse IFN- γ anti-viral activity. Neutralization activity may be measured with a encephalomyocarditis viral (EMCV) resistance assay using 1 ng/mL recombinant mouse IFN- γ (Cat. No. 554587) with L929 indicator cells.

50% Neutralization (ND50) at 1 - 20 ng/mL

\geq 95% Neutralization at 15 – 333 ng/mL

Suggested Companion Products

Catalog Number	Name	Size	Clone
554587	Recombinant Mouse IFN- γ	10 μ g	(none)
554682	Purified NA/LE Rat IgG1 κ Isotype Control	0.5 mg	R3-34
555138	Mouse IFN- γ ELISA Set	20 plates	B27
551866	Mouse IFN- γ (AN-18) ELISA Set	20 plates	B27
558258	Mouse IFN- γ ELISA Kit II	2 plates	(none)

Product Notices

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

References

Abrams J. Immunoenzymetric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. *Curr Protoc Immunol.* 2001; 1:6.20-6.21. (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)

Cherwinski HM, Schumacher JH, Brown KD, Mosmann TR. Two types of mouse helper T cell clone. III. Further differences in lymphokine synthesis between Th1 and Th2 clones revealed by RNA hybridization, functionally monospecific bioassays, and monoclonal antibodies. *J Exp Med.* 1987; 166(5):1229-1244. (Biology)

Ferrick DA, Schrenzel MD, Mulvania T, Hsieh B, Ferlin WG, Lepper H. Differential production of interferon-gamma and interleukin-4 in response to Th1- and Th2-stimulating pathogens by gamma delta T cells in vivo. *Nature.* 1995; 373(6511):255-257. (Clone-specific: Flow cytometry, Immunofluorescence)

Green JA, Yeh TJ, Overall JC. Rapid, quantitative, semiautomated assay for virus-induced and immune human interferons. *J Clin Microbiol.* 1980; 12(3):433-438. (Biology)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



Hsieh B, Schrenzel MD, Mulvania T, Lepper HD, DiMolfetto-Landon L, Ferrick DA. In vivo cytokine production in murine listeriosis. Evidence for immunoregulation by gamma delta+ T cells. *J Immunol.* 1996; 156(1):232-237. (Clone-specific: Flow cytometry, Immunofluorescence)

Mo XY, Sarawar SR, Doherty PC. Induction of cytokines in mice with parainfluenza pneumonia. *J Virol.* 1995; 69(2):1288-1291. (Clone-specific: ELISA)

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. (Clone-specific: ELISA)

Sarawar SR, Sangster M, Coffman RL, Doherty PC. Administration of anti-IFN-gamma antibody to beta 2-microglobulin-deficient mice delays influenza virus clearance but does not switch the response to a T helper cell 2 phenotype. *J Immunol.* 1994; 153(3):1246-1253. (Clone-specific: ELISA)

Vikingsson A, Pederson K, Muller D. Enumeration of IFN-gamma producing lymphocytes by flow cytometry and correlation with quantitative measurement of IFN-gamma. *J Immunol Methods.* 1994; 173(2):219-228. (Clone-specific: Flow cytometry, Immunofluorescence)

Yang X, HayGlass KT. A simple, sensitive, dual mAb based ELISA for murine gamma interferon determination: comparison with two common bioassays. *J Immunoassay.* 1993; 14(3):129-148. (Clone-specific: ELISA)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

