

# **Anti-Mouse IFN gamma Functional Grade Purified**

Catalog Number: 16-7311

Also Known As:Interferon-gamma, IFN-g, IFNg

For Research Use Only. Not for use in diagnostic procedures.

#### **Product Information**

Contents: Anti-Mouse IFN gamma Functional Grade

Purified

REF Catalog Number: 16-7311

Clone: XMG1.2

Concentration: 1 mg/mL Host/Isotype: Rat IgG1, kappa

**Handling Conditions:** Use in sterile environment. **Endotoxin Level:** Less than 0.001 ng/ug antibody, as

determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to Vial ☐ Use By: Refer to Vial

## **Description**

The XMG1.2 antibody reacts with mouse interferon (IFN) gamma. The XMG1.2 antibody is a neutralizing antibody. Mouse IFN gamma is a 20 kDa factor produced by activated T, B and NK cells, and is an anti-viral and anti-parasitic cytokine. IFN gamma, in synergy with other cytokines such as TNF alpha, inhibits proliferation of normal and transformed cells. Immunomodulatory effects of IFN gamma are exerted on a wide range of cell types expressing the high affinity receptors for IFN gamma. Glycosylation of IFN gamma does not affect its biological activity.

## **Applications Tested**

The Functional Grade Purified XMG1.2 antibody has been tested by LAL assay to verify low endotoxin levels and has been tested for ELISA capture and in bioassay for neutralization of IFNy bioactivity.

The XMG1.2 antibody at 15 ng/mL has been found to inhibit by 50% the biological effects of 1 ng/mL of mouse IFNγ (ND50), in an EMCV assay of L929 cell protection. Detailed information and protocols about cytokine bioassays and in vitro cytokine neutralization using antibodies can be found in the BestProtocols® section.

The XMG1.2 antibody has been tested as the capture antibody in a sandwich ELISA for analysis of mouse IFN $\gamma$  in combination with the biotin R4-6A2 (13-7312) antibody for detection and recombinant mouse IFN $\gamma$  (39-8311) as the standard. A suitable range of concentrations of this antibody for ELISA capture is 0.25 – 1.0 µg/mL. A standard curve consisting of doubling dilutions of the recombinant standard over the range of 2000 pg/mL - 15 pg/mL should be included in each ELISA plate. Detailed instructions for Cytokine Sandwich ELISA Using Matched Antibody Pairs can be found in the BestProtocols section.

For ELISPOT capture, the Functional Grade Purified AN-18 antibody is recommended.

#### References

Kimura A, Naka T, Kishimoto T. IL-6-dependent and -independent pathways in the development of interleukin 17-producing T helper cells. Proc Natl Acad Sci U S A. 2007 Jul 17;104(29):12099-104. (**XMG1.2**, IC flow, PubMed)

Zhang Y, Xu G, Zhang L, Roberts AI, Shi Y. Th17 cells undergo Fas-mediated activation-induced cell death independent of IFN-gamma. J Immunol. 2008 Jul 1;181(1):190-6. (**XMG1.2**, IC flow, PubMed)

Cho KS, Hill AB. T cell acquisition of APC membrane can impact interpretation of adoptive transfer experiments using CD45 congenic mouse strains. J Immunol Methods. 2008 Jan 31;330(1-2):137-45. (XMG1.2, IC flow, PubMed)

Feng X, Akiyoshi DE, Sheoran A, Singh I, Hanawalt J, Zhang Q, Widmer G, Tzipori S. Serial propagation of the microsporidian Enterocytozoon bieneusi of human origin in immunocompromised rodents. Infect Immun. 2006 Aug;74(8):4424-9. (XMG1.2, FA)

Hidalgo LG, Urmson J, Halloran PF. IFN-gamma decreases CTL generation by limiting IL-2 production: A feedback loop controlling effector cell production. Am J Transplant. 2005 Apr;5(4 Pt 1):651-61. (**XMG1.2**, NU, PubMed)

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 Jun;127:5-24.

### **Related Products**

14-8171 Mouse IL-17A Recombinant Protein
14-8231 Mouse IL-23 Recombinant Protein
88-7234 Mouse IL-23 ELISA Ready-SET-Gol® (Discontinued: Please see 88-7230 (2nd generation assay))

Not for further distribution without written consent. Copyright © 2000-2012 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com