### Brilliant Violet 711™ anti-human IFN-γ

Catalog # / Size: 3112695 / 25 tests

3112700 / 100 tests

Clone: 4S.B3

**Isotype:** Mouse IgG1, κ

**Immunogen:** Partially purified, native human IFN-γ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with Brilliant Violet 711<sup>™</sup> under optimal conditions. The solution is free of unconjugated Brilliant Violet 711<sup>™</sup> and

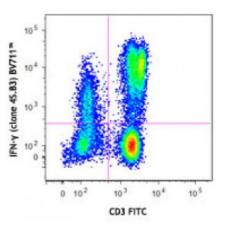
unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



PMA+ionomycin-stimulated (6 hours) human peripheral blood lymphocytes (in the presence of monensin) were surface stained with CD3 FITC, and then intracellularly stained with IFN-γ (clone 4S.B3) Brilliant Violet 711™ (top) or mouse IgG1, κ

#### **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

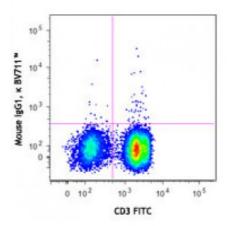
Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for

each application.

Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or

manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd.

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buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

## Application Notes:

ELISA or ELISPOT Detection5: The biotinylated 4S.B3 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified NIB42 antibody (Cat. No. 502402/502404) or purified MD-1 antibody (Cat. No. 507502/507513) as the capture antibody.

Flow Cytometry<sup>3,4,6-8</sup>: The fluorochrome-labeled 4S.B3 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IFN- $\gamma$ -producing cells within mixed cell populations.

# Additional reported applications (for the relevant formats) include:

neutralization<sup>1,2</sup>, Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponintreated tissue sections, and immunocytochemistry. The 4S.B3 antibody can neutralize the bioactivity of natural or recombinant IFN-γ.

Note: For testing human IFN-γ in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 430101 to 430106) are specially developed and recommended.

## Application References:

- 1. Meager A, et al. 1984. J. Interferon Res. 4:619. (Neut)
- 2. Meager A, 1987. *Lymphokines and Interferons: A Practical Approach*. IRL Press Ltd, Oxford, p. 105. (Neut)
- 3. Sester M, et al. 2002. J. Virol. 76:3748. (ICFC)
- 4. Infante-Duarte C, et al. 2000 J. Immunol. 165:6107. (ICFC)
- 5. Goodier M, et al. 2000. J. Immunol. 165:139. (ELISA)
- 6. Chen H, et al. 2005. J. Immunol. 175:591. (ICFC)
- 7. Smeltz RB, 2007. J. Immunol. 178:4786. (ICFC)
- 8. Iwamoto S, et al. 2007. J. Immunol. 179:1449. (ICFC) PubMed
- 9. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (ICFC)

#### **Description:**

Interferon- $\gamma$  is a potent multifunctional cytokine which is secreted primarily by activated NK cells and T cells. Originally characterized based on anti-viral activities, IFN- $\gamma$  also exerts anti-proliferative, immunoregulatory, and proinflammatory activities. IFN- $\gamma$  can upregulate MHC class I and II antigen expression by antigen-presenting cells.

# Antigen References:

- 1. Fitzgerald K, *et al.* Eds. 2001. The Cytokine FactsBook. Academic Press, San Diego.
- 2. De Maeyer E, et al. 1992. Curr. Opin. Immunol. 4:321.
- 3. Farrar M, et al. 1993. Annu. Rev. Immunol. 11:571