## **Product Data Sheet**

### FITC anti-human IFN-γ

**Catalog # / Size:** 3112535 / 50 μg

3112525 / 25 tests

3112530 / 100 tests

Clone: 4S.B3

**Isotype:** Mouse IgG1, κ

Immunogen: Partially purified, native human IFN-y

Reactivity: Human

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

chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

Formulation: test sizes: Phosphate-buffered solution,

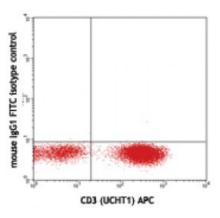
pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

microg size: Phosphate-buffered solution, pH 7.2, containing 0.09%

sodium azide.

Concentration: microg sizes: 0.5 mg/ml

test sizes: lot-specific



PMA/ionomycin-stimulated (6 hours) human peripheral blood lymphocytes stained with mouse IgG1 FITC isotype control and CD3 (UCHT1) APC

### **Applications:**

**Applications:** Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by intracellular

immunofluorescent staining with flow

cytometric analysis. Test size

products are transitioning from 20 microL to 5 microL per test. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

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

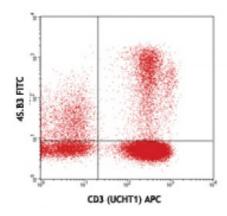
antibody.

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-γ - producing cells within mixed cell



PMA/ionomycin-stimulated (6 hours) human peripheral blood lymphocytes stained with 4S.B3 FITC and CD3 (UCHT1) APC

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<sup>™</sup> 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)
- 10. Spencer AJ, et al. 2014. PLoS One. 9:100538. PubMed
- 11. Rochman Y, et al. 2015. PloS One. 10:122198. PubMed

#### **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.
- De Maeyer E, et al. 1992. Curr. Opin. Immunol. 4:321.
  Farrar M, et al. 1993. Annu. Rev. Immunol. 11:571