

# Product Data Sheet

## PE anti-human IFN- $\gamma$

**Catalog # / Size:** 502508 / 25 tests  
502510 / 50  $\mu$ g  
502509 / 100 tests

**Clone:** 4S.B3

**Isotype:** Mouse IgG1,  $\kappa$

**Immunogen:** Partially purified, native human IFN- $\gamma$

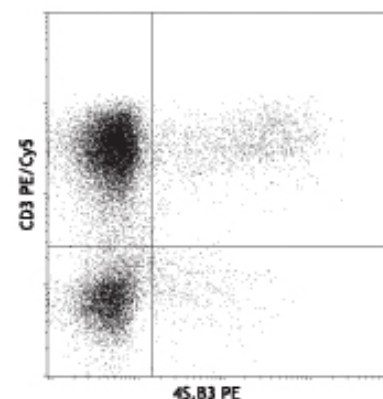
**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

**Formulation:**  $\mu$ g format: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  
Test format: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide, 0.2% (w/v) BSA (USA origin).

**Concentration:** test sizes: lot-specific;  $\mu$ g size: 0.2 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



PMA/Ionomycin-stimulated human PBMCs were stained with CD3 PE/Cy5 and 4S.B3 PE

## Applications:

**Applications:** ICFC - *Quality tested*

**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  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Application Notes:** **ELISA or ELISPOT Detection<sup>5</sup>:** 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, saponin-treated tissue sections, and immunocytochemistry. The 4S.B3 antibody can neutralize the bioactivity of natural or recombinant IFN- $\gamma$ .  
**Note:** For testing human IFN- $\gamma$  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.
4. Gray P, *et al.* 1987. *Lymphokines* 13:151.

### Related Products:

Product  
PE Mouse IgG1,  $\kappa$  Isotype Ctrl  
Cell Staining Buffer  
Fixation Buffer  
Permeabilization Wash Buffer (10X)

Clone  
MOPC-21

Application  
FC, ICFC  
FC, ICC, ICFC  
ICC, ICFC  
ICC, ICFC, IHC



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RBC Lysis Buffer (10X)  
Brefeldin A Solution (1,000X)  
Monensin Solution (1,000X)  
PE Mouse IgG1,  $\kappa$  Isotype Ctrl (ICFC)

MOPC-21

FC, ICFC  
ICFC  
ICFC  
ICFC



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