

# Product Data Sheet

## Pacific Blue™ anti-human IFN-γ

**Catalog # / Size:** 502521 / 25 µg  
502522 / 100 µg

**Clone:** 4S.B3

**Isotype:** Mouse IgG1, κ

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

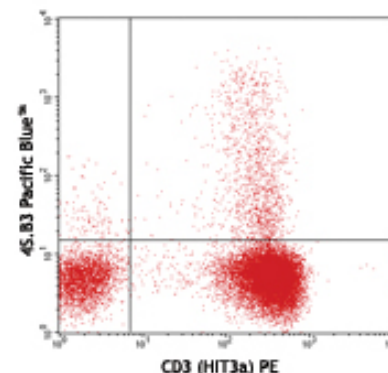
**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus

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

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

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



PMA+ionomycin-stimulated (6 hours)  
human peripheral blood lymphocytes  
intracellularly stained with 4S.B3  
Pacific Blue™ and CD3 (HIT3a) 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. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.25 µg per 10<sup>6</sup> cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**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-γ-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-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-γ is a potent multifunctional cytokine which is secreted primarily by activated NK cells and T cells. Originally characterized based on anti-viral activities, IFN-γ also exerts anti-proliferative, immunoregulatory, and proinflammatory activities. IFN-γ 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  
Cell Staining Buffer  
Fixation Buffer  
Permeabilization Wash Buffer (10X)

### Clone

### Application

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



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Brefeldin A Solution (1,000X)  
Monensin Solution (1,000X)  
7-AAD Viability Staining Solution  
Pacific Blue™ Mouse IgG1, κ Isotype Ctrl

MOPC-21

ICFC  
ICFC  
FC  
FC, ICFC



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