

## **Product Data Sheet**

## PE anti-human CD119 (IFN- $\gamma$ R $\alpha$ chain)

Catalog # / Size: 308703 / 25 tests

308704 / 100 tests

Clone: GIR-94

**Isotype:** Mouse IgG2b,  $\kappa$ 

**Immunogen:** Human IFN- $\gamma$ R $\alpha$ , purified from human placenta

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with

PE under optimal conditions. The solution is free of unconjugated PE and

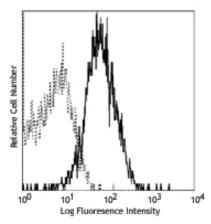
unconjugated antibody.

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

0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Human peripheral blood lymphocytes stained with biotinylated GIR-94 and detected with Sav-PE

## **Applications:**

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by 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 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at

www.biolegend.com/testsize regarding the test size change.

Application Notes: Additional reported applications (for the relevant formats) include: Western blotting<sup>3,4</sup>, immunoprecipitation<sup>3,4</sup>,

immunofluorescence microscopy<sup>6</sup>. GIR-94 antibody does not inhibit IFN- $\gamma$  binding to IFN- $\gamma$  R  $\alpha$  chain. For most successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 308704) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody (Cat. No. 308706) or biotinylated anti-mouse IgG second step (Cat. No. 405303), followed by SAv-PE (Cat. No. 405204)).

Application References: 1. Sheehan K, et al. 1988. J. Immunol. 140:4231.

Jouanguy E, et al. 2000. J. Clin. Invest. 105:1429.
Kaplan D, et al. 1996. J. Biol. Chem. 271:9. (WB IP)

4. Bach EA, et al. 1996. Mol. Cell. Biol. 16:3214. (WB IP)

5. Choi JC, *et al.* 2007. *J. Immunol.* 178:1598. 6. Humlicek AL, *et al.* 2007. *J. Immunol.* 178:6395. (IF)

Description: CDw119 is a 90-100 kD type I transmembrane protein, also known as IFN-γ R α chain or IFN-γRI. The IFN-γ receptor

is a complex of a high affinity IFN- $\gamma$ -binding chain (aka, IFN- $\gamma$  R  $\alpha$  chain) and a second accessory protein required for signal transduction known as IFN-γ R β chain. The IFN-γ R α chain is a member of the class II cytokine receptor family. Binding of IFN-γ induces receptor dimerization and internalization. Signal transduction involves Jak1 and Jak2 protein kinases and involves STAT1 activation. The IFN-γ receptor is expressed at moderate levels on virtually every

cell with the exception of erythrocytes.

Antigen References: 1. Calderon J, et al. 1988. P. Natl. Acad. Sci. USA 85:4837. 2. Basler C, et al. 2002. Int. Rev. Immunol. 21:305.

3. Brierley M, et al. 2002. J. Interferon Cytokine Res. 22:835.

**Application Related Products: Product** Clone PE Mouse IgG2b, κ Isotype Ctrl FC, ICFC MPC-11 PE Streptavidin FC, ICFC FC, ICC, ICFC

Cell Staining Buffer RBC Lysis Buffer (10X)

PE anti-human IFN- $\gamma$  R  $\beta$  chain PE anti-human CD119 (IFN- $\gamma$  R  $\alpha$  chain) 2HUB-159 GIR-208

FC FC, ICC, ICFC Human TruStain FcX™ (Fc Receptor Blocking Solution)





FC, ICFC