Technical Data Sheet

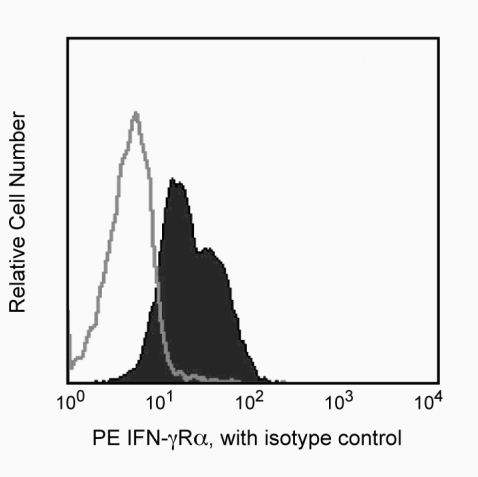
PE Mouse Anti-Human CD119

Product Information

Material Number:	**558937**
Alternate Name:	IFN-γ Receptor α chain
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	GIR-94
Immunogen:	Human IFN-γRα
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The GIR-94 antibody recognizes the extracellular region of the alpha chain subunit (80-95 kDa glycoprotein) of the human interferon-γ receptor (IFN-γRα; aka, CD119). The functionally active-form of the human IFN-γ receptor consists of two (or more) subunits, with IFN-γRα responsible for IFN-γ binding and both the IFN-γR α and β chains required for the transduction of biologic responses. The IFN-γ receptor α chain (CD119) is expressed on the surface of most human cells (except mature erythrocytes) including monocytes, macrophages, T cells, B cells, NK cells, neutrophils, fibroblasts, epithelial cells, and endothelium. The ability of this antibody to bind to IFN-γ receptors of species other than human has not been determined. The immunogen used to generate this hybridoma was human IFN-γRα purified from human placenta. The GIR-94 is a non-neutralizing antibody.



Expression of cell surface IFN-γRα by human peripheral blood mononuclear cells. *Human PBMC were isolated by Lymphoprep (Nycomed) density centrifugation. The cells were stained with R-PE-conjugated GIR-94 antibody (1 µg; Cat. No. 558937). The immunofluorescent staining patterns for cells stained with either R-PE-GIR-94 (filled histogram) or an R-PE-conjugated Ig isotype control (clone 27-35, Cat No. 555058, 1 µg; open histogram) are shown. The histograms were generated from reanalyzed flow cytometric data files that were gated for cells that had the light-scattering characteristics of lymphocytes.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.
Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

Immunofluorescent staining and flow cytometric analysis: The R-PE conjugated GIR-94 antibody (Cat. No. 558937) can be used for the immunofluorescent staining (≤ 1 µg antibody/10[6] cells) and flow cytometric analysis of the levels of membrane IFN-γRα expressed by human cell lines or human lymphoid cells. An appropriate R-PE conjugated immunoglobulin isotype control is the clone 27-35 (Cat. No. 555743).

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Since GIR-94 is a non-neutralizing antibody, it can be used for the unobstructed immunofluorescent staining and flow cytometric analysis of cells in systems where the IFN-γ ligand is present. Based on our testing results,(data not shown) the presence of exogenous recombinant human IFN-γ at levels ≤ 50 ng/10[6] cells was insufficient to inhibit the binding of GIR-94 (at 0.06 µg mAb/1 million cells).

Suggested Companion Products

Catalog Number	Name	Size	Clone
555743	PE Mouse IgG2b κ Isotype Control	100 tests	27-35
555058	PE Mouse IgG2b, κ Isotype Control	0.1 mg	27-35

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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Bach EA, Aguet M, Schreiber RD. The IFN gamma receptor: a paradigm for cytokine receptor signaling. *Annu Rev Immunol.* 1997; 15:563-591.(Biology)

Greenlund AC, Schreiber RD, Goeddel DV, Pennica D. Interferon-gamma induces receptor dimerization in solution and on cells. *J Biol Chem.* 1997; 268(24):18103-18110.(Biology)

Sheehan KC, Calderon J, Schreiber RD. Generation and characterization of monoclonal antibodies specific for the human IFN-gamma receptor. *J Immunol.* 1988; 140(12):4231-4237.(Immunogen)