

Technical Data Sheet

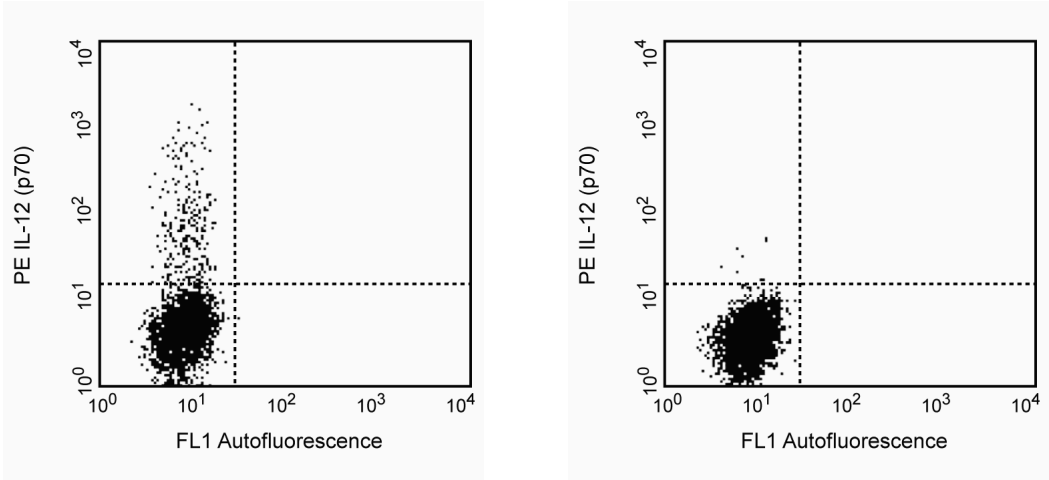
PE Rat Anti-Human IL-12 p70

Product Information

Material Number:	559325
Size:	100 tests
Vol. per Test:	20 µl
Clone:	20C2
Isotype:	Rat IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 20C2 antibody reacts with the biologically active form of human IL-12 p70 heterodimer, but not with the p40 monomer or homodimer.



*Specific control for intracellular staining of human IL-12 p70-producing cells. Pharmingen's HiCK-3 positive control cells (Cat. No. 555063) were intracellularly stained using Pharmingen's intracellular staining protocol. The panels show intracellular staining with PE-conjugated antihuman IL-12 p70 (0.06 µg) and the pre-blocking of that staining with purified anti-human IL-12 p70 (5.0 µg, see right panel).*

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

Intracellular staining (flow cytometry)	Routinely Tested
---	------------------

Recommended Assay Procedure:

**Immunofluorescent Staining and Flow Cytometric Analysis:** The 20C2 antibody is useful for immunofluorescent staining and flow cytometric analysis of mixed cell populations to identify and enumerate IL-12 p70 producing cells. This 100 Test Size formulation of the PE-conjugated 20C2 antibody has been pre-titrated to assure effective intracellular detection of human IL-12 p70 using 20 µl/1 x 10<sup>6</sup> cells.

A suitable rat IgG1 isotype control for assessing the level of fluorochrome associate background staining on paraformaldehyde-fixed/saponin-permeabilized human cells is also available in a 100 Test Size formulation PE-R3-34 immunoglobulin (Cat. No. 559318). A useful control for demonstrating specificity of staining is either of the following: 1) pre-block the fluorochrome-conjugated 20C2 antibody with excess ligand (e.g., recombinant human IL-12 p70, Cat. No. 554613) prior to staining, or 2) pre-block the fixed/permeabilized cells

BD Biosciences

[bdbiosciences.com](http://bdbiosciences.com)

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.268.5430	32.53.720.550	0120.8555.90	65.6861.0633	0800.771.7157

For country-specific contact information, visit [bdbiosciences.com/how\\_to\\_order/](http://bdbiosciences.com/how_to_order/)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2011 BD



with unlabeled 20C2 antibody (Cat. No. 557018) prior to staining. The intracellular staining technique and use of blocking controls are described in detail by C. Prussin and D. Metcalfe.

**Important Note:** This pre-titered antibody solution does not contain a cell permeabilization agent. It is necessary to include a cell permeabilization agent when using the pre-titered antibody solution to stain fixed and permeabilized cells. Perm/Wash™ Buffer (Cat. No. 554723) contains the permeabilization agent saponin and is useful for this purpose.

### Suggested Companion Products

Catalog Number	Name	Size	Clone
559318	PE Rat IgG1, $\kappa$ Isotype Control	100 tests	R3-34
555063	HiCK-3 Human Cytokine Positive Control Cells	1.0 ml	(none)
554715	BD Cytotfix/Cytoperm Plus Kit (with BD GolgiStop)	250 tests	(none)

### Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to [www.bdbiosciences.com/pharmlngen/protocols](http://www.bdbiosciences.com/pharmlngen/protocols) for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
5. 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.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

### References

Gately MK, Chizzonite R, Presky DH. Measurement of Human and Mouse Interleukin-12. In: Cooligan J, Kruisbeek A, Margulies D, Shevach E, Storb W, ed. *Current Protocols in Immunology*. New York: John Wiley and Sons; 1995:6-16. (Clone-specific)

Prussin C, Metcalfe DD. Detection of intracytoplasmic cytokine using flow cytometry and directly conjugated anti-cytokine antibodies. *J Immunol Methods*. 1995; 188(1):117-128. (Methodology)