Technical Data Sheet

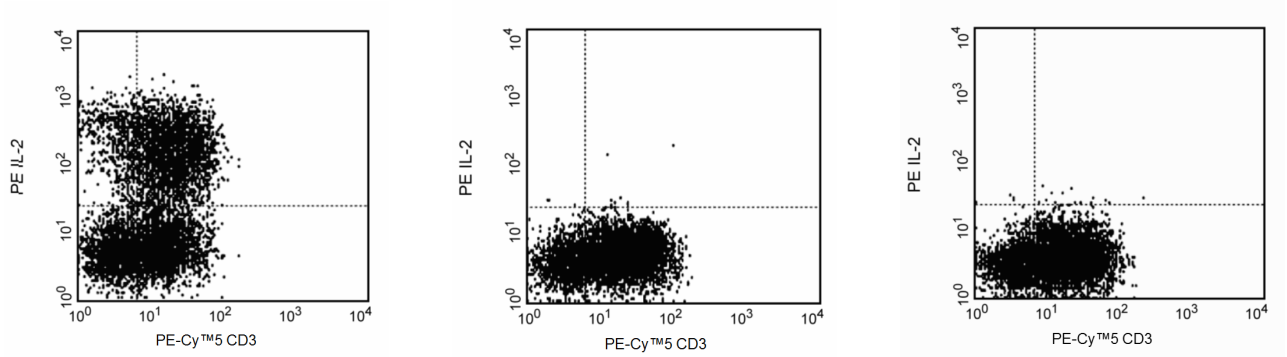
PE Rat Anti-Human IL-2

Product Information

Material Number:	**560902**
Size:	25 tests
Vol. per Test:	20 µl
Clone:	MQ1-17H12
Immunogen:	Human IL-2 Recombinant Protein
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The MQ1-17H12 antibody reacts with human interleukin-2 (IL-2). The immunogen used to generate the MQ1-17H12 hybridoma was recombinant human IL-2. Unconjugated or purified forms of this antibody have been reported to be neutralizing for human IL-2 bioactivity.



Expression of IL-2 by stimulated CD3+ and CD3-human PBMC. *Human PBMC were stimulated for 18 hours with PMA (Sigma, Cat. No. P-8139) and ionomycin (Sigma, Cat. No. I-0634), in the presence of BD GolgiStop™ (2 µl final concentration; Cat. No. 554724). The PBMC were stained with PE-Cy™5-anti-CD3 (PE-Cy™5-UCHT1, Cat. No. 555334), fixed, permeabilized, and then stained with 20 µl of the PE Rat Anti-Human IL-2 antibody (PE-MQ1-17H12) (left panel). To demonstrate specificity of staining, the binding of PE-MQ1-17H12 was blocked by the preincubation of the conjugated antibody with recombinant human IL-2 (0.25 mg, Cat. No. 554603; middle panel), and by preincubation of the fixed/permeabilized cells with an excess of the unlabeled MQ1-17H12 antibody (10 mg, Cat. No. 554563; right panel) prior to staining with the PE-MQ1-17H12 antibody. The quadrant markers for the bivariate dot plots were set based on the autofluorescence control, and verified with the recombinant cytokine blocking (middle panel) and unlabeled antibody blocking specificity controls (right panel).*

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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.

Application Notes

Application

Intracellular staining (flow cytometry)	Routinely Tested

Recommended Assay Procedure:

Flow Cytometry: This antibody can be used for multicolor immunofluorescent staining and flow cytometric analysis to identify and enumerate IL-2-producing cells within mixed cell populations. A useful control for demonstrating specificity of staining is to pre-block the conjugated MQ1-17H12 antibody with a molar excess of ligand (e.g., recombinant human IL-2) or with an unconjugated form of the MQ1-17H12 antibody (Cat. No. 554563) prior to staining.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554603	Recombinant Human IL-2	10 µg	(none)
554563	Purified Rat Anti-Human IL-2	0.1 mg	MQ1-17H12
559317	PE Rat IgG2a κ Isotype Control	100 tests	R35-95
554723	Perm/Wash Buffer	100 ml	(none)

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554724	Protein Transport Inhibitor (Containing Monensin)	0.7 ml	(none)
555334	PE-Cy™5 Mouse Anti-Human CD3	100 tests	UCHT1

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. This product is manufactured and sold under license from Pestka Biomedical Laboratories, Inc. (d/b/a PBL InterferonSource) and may be used solely as indicated. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics is strictly prohibited. This product is covered by U.S. Patent No. 5,597,901 and Bulgarian Patent No. BG1895.
6. All other brands are trademarks of their respective owners.
7. Cy is a trademark of Amersham Biosciences Limited.
8. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Abrams J. Immunoenzymetric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. In: Coligan J, Kruisbeek A, Margulies D, Shevach E, Strober W, ed. *Current Protocols in Immunology.* New York: John Wiley and Sons; 1995:6.20-6.21. (Biology)

Abrams JS, Roncarolo MG, Yssel H, Andersson U, Gleich GJ, Silver JE. Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. *Immunol Rev.* 1992; 127:5-24. (Biology)

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