

# IL-2 Monoclonal Antibody (MQ1-17H12), PE-Cyanine7, eBioscience™

Product Details	
Size	25 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MQ1-17H12
Conjugate	PE-Cyanine7
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573517

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	5 µL (0.125 µg)/test	2 Publications

## Product Specific Information

**Description:** The MQ1-17H12 antibody reacts with human interleukin-2 (IL-2), a 17 kDa T cell growth factor and a major immunoregulatory cytokine. The MQ1-17H12 antibody is a non-neutralizing antibody.

**Applications Reported:** This MQ1-17H12 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

**Applications Tested:** This MQ1-17H12 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.125 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

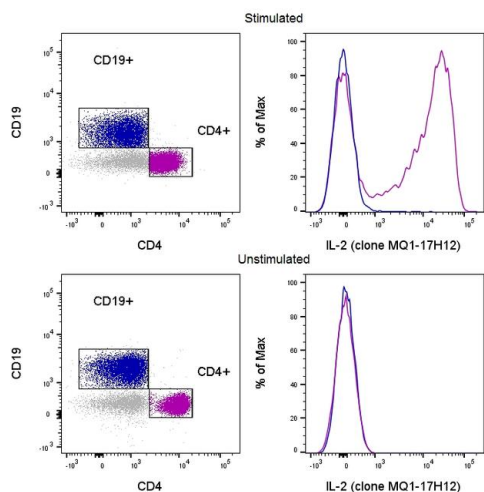
**Light sensitivity:** This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

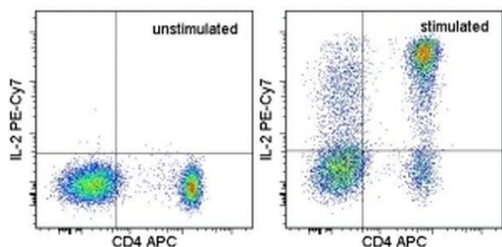
## Advanced Verification Data



### IL-2 Antibody (25-7029-41)

Intracellular staining of stimulated human peripheral blood cells. As expected based on known expression patterns, IL-2 clone MQ1-17H12 stains a subset of CD4+ T cells only after stimulation (top) and does not stain CD19+ B cells regardless of stimulation (top and bottom). Details: Normal human peripheral blood cells were cultured in the presence of Protein Transport Inhibitors (Unstimulated, bottom row) or Cell Stimulation Cocktail (plus protein transport inhibitors, 500X) for 5 hours (Stimulated, top row). Cells were fixed and permeabilized with the IC Fixation and Permeabilization Buffer Set and protocol followed by intracellular staining with CD19 (clone SJ25C1), CD4 (clone RPA-T4), and IL-2 (clone MQ1-17H12). Cells in the CD19+ (blue histogram) or CD4+ (purple histogram) gates were used for analysis. Cell Treatment validation info.

## Product Images For IL-2 Monoclonal Antibody (MQ1-17H12), PE-Cyanine7, eBioscience™



### IL-2 Antibody (25-7029-41) in Flow

Normal human peripheral blood cells were unstimulated (left) or stimulated (right) with Cell Stimulation Cocktail (plus protein transport inhibitors) (Product # 00-4975-03). Cells were intracellularly stained with Anti-Human CD4 APC (Product # 17-0047-42) and Rat IgG2a K Isotype Control PE-Cyanine7 (Product # 25-4321-82) or Anti-Human IL-2 PE-Cyanine7. Viable cells, as determined by Fixable Viability Dye eFluor® 780 (Product # 65-0865-14), in the lymphocyte gate were used for analysis.

## Flow Cytometry (2)

### PLoS pathogens

#### A Quantitative Analysis of Complexity of Human Pathogen-Specific CD4 T Cell Responses in Healthy M. tuberculosis Infected South Africans.

"25-7029 was used in Flow cytometry/Cell sorting to estimate the breadth of T cell responses for the first time in the context of an infection and human population setting."

Authors: Lindestam Arlehamn CS,McKinney DM,Carpenter C,Paul S,Rozot V,Makgotlho E,Gregg Y,van Rooyen M, Ernst JD,Hatherill M,Hanekom WA,Peters B,Scriba TJ,Sette A

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2016

### Cancer immunology research

#### PD-1+Tim-3+ CD8+ T Lymphocytes Display Varied Degrees of Functional Exhaustion in Patients with Regionally Metastatic Differentiated Thyroid Cancer.

"25-7029 was used in Flow cytometry/Cell sorting to determine that the release of PD-1 and Tim-3, and the inhibition of Tregs, may encourage tumour elimination in metastatic differentiated thyroid cancer."

Authors: Severson JJ,Serracino HS,Mateescu V,Raeburn CD,McIntyre RC,Sams SB,Haugen BR,French JD

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2015

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