

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

## Product Details

|                    |   |
|--------------------|---|
| Size               | 50 µg   |
| Species Reactivity | Human   |
| Published Species  | Cynomolgus monkey, Non-human primate, Human, Mouse, Rhesus monkey |
| Host/Isotype       | Rat / IgG2a, kappa  |
| Class              | Monoclonal  |
| Type               | Antibody  |
| Clone              | MQ1-17H12   |
| Conjugate          | Unconjugated  |
| Form               | Liquid  |
| Concentration      | 0.5 mg/mL   |
| Purification       | Affinity chromatography   |
| Storage buffer     | PBS, pH 7.2   |
| Contains           | 0.09% sodium azide  |
| Storage conditions | 4° C  |
| RRID               | AB_468408   |

| Applications                            | Tested Dilution | Publications    |
|---|-----------------|-----------------|
| Immunohistochemistry (IHC)              | -               | 1 Publication   |
| Immunohistochemistry (Frozen) (IHC (F)) | -               | 2 Publications  |
| Flow Cytometry (Flow)                   | Assay-Dependent | 19 Publications |
| ELISA (ELISA)                           | 1-4 µg/mL       | 2 Publications  |
| Miscellaneous PubMed (Misc)             | -               | 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:** The MQ1-17H12 antibody has been reported for use as capture antibody for ELISA and for intracellular staining for flow cytometric analysis. Fluorochrome conjugated MQ1-17H12 antibody is recommended for use in intracellular staining for flow cytometry.

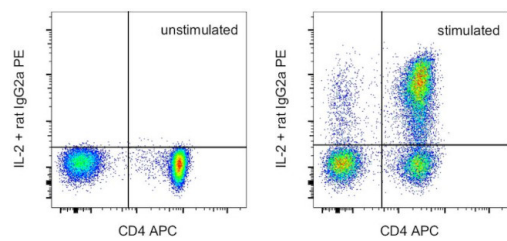
**Applications Tested:** The MQ1-17H12 antibody has been tested as the capture antibody in a sandwich ELISA for analysis of human Interleukin-2 (IL-2) in combination with the biotin anti-human IL-2 poly (13-7028) antibody for detection and recombinant human IL-2 (14-8029) as the standard. A suitable range of concentrations of this antibody for ELISA capture is 1-4 µg/mL. A standard curve consisting of doubling dilutions of the recombinant standard over the range of 1000 pg/mL - 8 pg/mL should be included in each ELISA plate.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

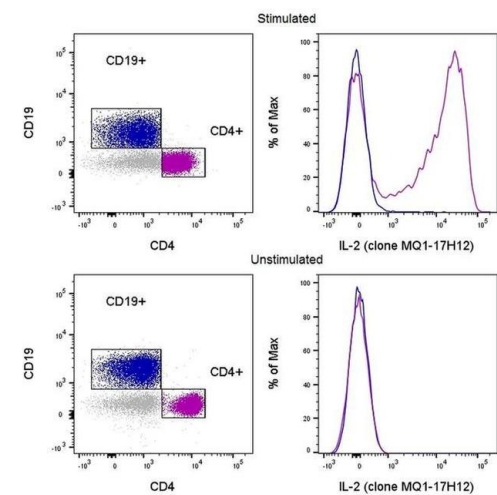
**Aggregation:** Less than 10%, as determined by HPLC.

**Filtration:** 0.2 µm post-manufacturing filtered.

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



**IL-2 Antibody (14-7029-81) in Flow**  
Normal human peripheral blood cells were unstimulated (left) or stimulated for 5 hours with the Cell Stimulation Cocktail (plus protein transport inhibitors) (Product # 00-4975-93) (right). Cells were then stained intracellularly, using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol, with CD4 Monoclonal Antibody, APC (Product # 17-0049-42) and 0.125 µg IL-2 Monoclonal Antibody followed by IgG2a Monoclonal Antibody, PE (Product # 12-4817-82). Cells in the lymphocyte gate were used for analysis.



**IL-2 Antibody (14-7029-81)**  
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 & 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. {TM}

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26 References

Immunohistochemistry (1)

|   |  |
|---|--|
| <b>Molecular cancer therapeutics</b><br><b>Antibody-Based Delivery of Cytokine Payloads to Carbonic Anhydrase IX Leads to Cancer Cures in Immunocompetent Tumor-Bearing Mice.</b><br>"14-7029-81 was used in Immunohistochemistry-immunofluorescence to describe the design, production, and characterization of four novel antibody-cytokine fusion proteins directed against human carbonic anhydrase IX, a highly validated marker of hypoxia that is overexpressed in clear cell renal cell carcinoma and other malignancies."<br>Authors: Ziffels B,Stringhini M,Probst P,Fugmann T,Sturm T,Neri D | <b>Year</b><br>2019<br><br><b>Species</b><br>Mouse |
|---|--|

Immunohistochemistry (Frozen) (2)

|  |  |
|--|--|
| <b>Oncotarget</b><br><b>A novel format for recombinant antibody-interleukin-2 fusion proteins exhibits superior tumor-targeting properties <i>in vivo</i>.</b><br>"14-7029-85 was used in Immunohistochemistry (Frozen) to study the <i>in vivo</i> tumor-homing and anti-cancer activity of antibody-interleukin 2 fusion proteins."<br>Authors: Ongaro T,Gouyou B,Stringhini M,Corbellari R,Neri D,Villa A | <b>Year</b><br>2020<br><br><b>Species</b><br>Mouse<br><br><b>Dilution</b><br>1:150 |
|--|--|

A Novel Fully-Human Potency-Matched Dual Cytokine-Antibody Fusion Protein Targets Carbonic Anhydrase IX in Renal Cell Carcinomas.

"14-7029-85 was used in Immunohistochemistry (Frozen), Flow Cytometry to report the cloning, expression and characterization of IL2-XE114-TNFmut, a dual-cytokine biopharmaceutical featuring the sequential fusion of interleukin-2 (IL2) with the XE114 antibody in scFv format and a tumor necrosis factor mutant (TNFmut)."

Authors: De Luca R,Gouyou B,Ongaro T,Villa A,Ziffels B,Sannino A,Buttinoni G,Galeazzi S,Mazzacuva M,Neri D

Year  
2020

Species  
Human

Flow Cytometry (19)

Dynamics of spike-and nucleocapsid specific immunity during long-term follow-up and vaccination of SARS-CoV-2 convalescents.

"Published figure using IL-2 monoclonal antibody (Product # 14-7029-81) in Flow Cytometry"

Authors: Koerber N,Priller A,Yazici S,Bauer T,Cheng CC,Mijoevi H,Wintersteller H,Jeske S,Vogel E,Feuerherd M, Tinnefeld K,Winter C,Ruland J,Gerhard M,Haller B,Christa C,Zelger O,Roggendorf H,Halle M,Erber J,Lingor P,Keppler O,Zehn D,Protzer U,Knolle PA

Year  
2022

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More applications with references on thermofisher.com

- ELISA (2)
- Misc (2)

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