# CD152 (CTLA-4) Monoclonal Antibody (14D3), APC, eBioscience™

| Product Details | |
|---|---|
| Size | 100 Tests |
| Species Reactivity | Human, Rhesus monkey |
| Published Species | Human |
| Host/Isotype | Mouse / IgG2a, kappa |
| Recommended Isotype Control | Mouse IgG2a kappa Isotype Control (eBM2a), APC, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | 14D3 |
| Conjugate | APC |
| Form | Liquid |
| Concentration | 5 µL/Test |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.2% BSA, 0.1% gelatin |
| Contains | 0.09% sodium azide |
| Storage Conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_2688162 |

| Applications | Tested Dilution | Publications |
|---|---|---|
| Flow Cytometry (Flow) | 5 µL (0.03 µg)/test | 1 Publication |

## Product Specific Information

Description: The 14D3 monoclonal antibody reacts with human CD152, also known as cytotoxic T lymphocyte antigen-4 (CTLA-4). CTLA-4, a protein with structural similarities to CD28, is expressed on activated T cells (activated B cells may also express CTLA-4) and binds the B7 family members, CD80 (B7-1) and CD86 (B7-2), with higher affinity than CD28 does. CTLA-4 and CD28 appear to deliver opposing signals to T cells: while CD28 is a potent costimulator, CTLA-4 restricts the progression of T cells to an activated state by inhibiting IL-2 secretion and cellular proliferation. The cytoplasmic portion of CTLA-4 contains ER retention motifs, resulting in intracellular localization of a large proportion of newly synthesized CTLA-4 in response to TCR signaling.

The 14D3 antibody also recognizes rhesus monkey and has inhibitor activity.

Applications Reported: The 14D3 antibody has been reported for use in flow cytometric analysis.

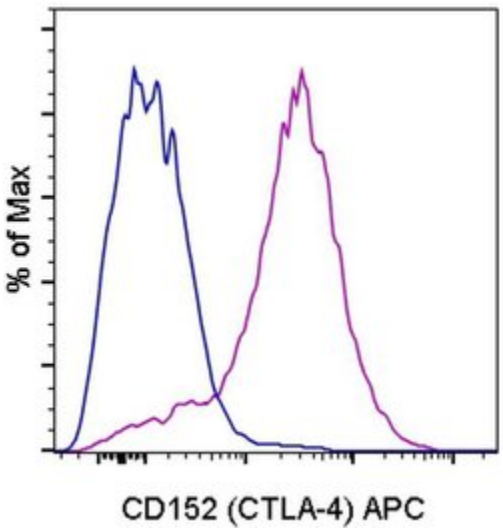
Applications Tested: This 14D3 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of stimulated human peripheral blood cells using the Intracellular Fixation and Permeabilization Buffer Set (cat. 88-8824) and protocol. Please refer to Best Protocols: Protocol A: Two step protocol for (cytoplasmic) intracellular proteins located under the Resources Tab online. This can be used at 5 µL (0.03 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 10^5 to 10^8 cells/test.

Furthermore, due to the intracellular localization of a large portion of CTLA-4, for complete detection it may be necessary to assess intracellular expression, in addition to surface expression of CTLA-4.

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For CD152 (CTLA-4) Monoclonal Antibody (14D3), APC, eBioscience™




**CD152 (CTLA-4) Antibody (17-1529-42) in Flow**
Unstimulated (blue histogram) or 3-day PHA (Product # 00-4977-03)-stimulated normal human peripheral blood cells (purple histogram) were intracellularly stained with Anti-Human CD152 (CTLA-4) APC using the Intracellular Fixation and Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Viable cells in the lymphocyte gate, as determined by Fixable Viability Dye eFluor® 450 (Product # 65-0863-14), were used for analysis.

## 1 Reference

### Flow Cytometry (1)

**Oncotarget**

**A cellular platform for the evaluation of immune checkpoint molecules.**

"17-1529 was used in Flow cytometry/Cell sorting to evaluate the potential of fluorescence-based transcriptional reporters based on the human Jurkat T cell line in conjunction with engineered T cell stimulator cell lines for investigating coinhibitory pathways."

Authors: Jutz S,Hennig A,Paster W,Asrak Ö,Dijanovic D,Kellner F,Pickl WF,Huppa JB,Leitner J,Steinberger P

**Species**
Human

**Dilution**
Not Cited

**Year**
2017