

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

Product Details

Size	100 Tests
Species Reactivity	Human, Rhesus monkey
Published Species	Human, Rhesus monkey
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	14D3
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10805626

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.03 µg)/test	30 Publications
Miscellaneous PubMed (Misc)	-	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.

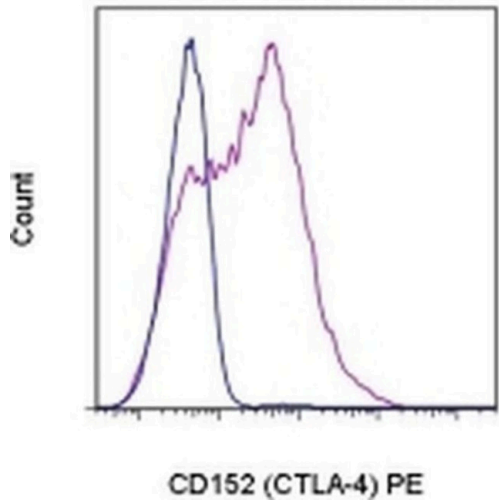
Applications Tested: This 14D3 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of stimulated human peripheral blood cells using the Intracellular Fixation & Permeabilization Buffer Set (cat. 88-8824) and protocol. Please refer to Best Protocols: Protocol 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 10⁵ to 10⁸ 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: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

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



CD152 (CTLA-4) Antibody (12-1529-42) in Flow
PHA-stimulated human peripheral blood cells were intracellularly stained with Mouse IgG2a K Isotype Control PE (Product # 12-4724-81) (blue histogram) or Anti-Human CD152 (CTLA-4) PE (purple histogram) using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Cells in the lymphocyte gate were used for analysis.

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Flow Cytometry (30)

<p>Heliyon</p> <p>Immunometabolic analysis shows a distinct cyto-metabotype in Covid-19 compared to sepsis from other causes.</p> <p>"12-1529-42 was used in Flow cytometry/Cell sorting to support the hypothesis that IFN- γ -PD-L1 axis might be involved in the cytokine release syndrome typical of severe Covid-19 and the phenomenon persisted through multiple pandemic waves despite use of immunomodulation."</p> <p>Authors: Trovato FM,Mujib S,Jerome E,Cavazza A,Morgan P,Smith J,Depante MT,O'Reilly K,Luxton J,Mare T,Napoli S,McPhail MJ</p>	<p>Year 2022</p> <p>Species Human</p>
<p>Journal for immunotherapy of cancer</p> <p>Cancer stem-like cells evade CD8⁺CD103⁺ tumor-resident memory T (T_{RM}) lymphocytes by initiating an epithelial-to-mesenchymal transition program in a human lung tumor model.</p> <p>"Published figure using CD152 (CTLA-4) monoclonal antibody (Product # 12-1529-42) in Flow Cytometry"</p> <p>Authors: Cognac S,Damei I,Gros G,Caidi A,Terry S,Chouaib S,Deloger M,Mami-Chouaib F</p>	<p>Year 2022</p>

[View more Flow references on thermofisher.com](#)

Miscellaneous PubMed (1)

<p>JCI insight</p> <p>Mitochondrial dysregulation and glycolytic insufficiency functionally impair CD8 T cells infiltrating human renal cell carcinoma.</p> <p>"12-1529 was used in Flow cytometry/Cell sorting to show that improving metabolic function of clear cell renal cell carcinoma CD8 tumor infiltrating lymphocytes may promote the immune response."</p> <p>Authors: Siska PJ,Beckermann KE,Mason FM,Andrejeva G,Greenplate AR,Sendor AB,Chiang YJ,Corona AL,Gemta LF,Vincent BG,Wang RC,Kim B,Hong J,Chen CL,Bullock TN,Irish JM,Rathmell WK,Rathmell JC</p>	<p>Year 2017</p> <p>Species Human</p>
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