

CD152 (CTLA-4) Monoclonal Antibody (14D3), PerCP-eFluor 710, 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), PerCP-eFluor 710, eBioscience
Class	Monoclonal
Type	Antibody
Clone	14D3
Conjugate	PerCP-eFluor™ 710
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_2573718

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.03 µg)/test	5 Publications

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: This 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.

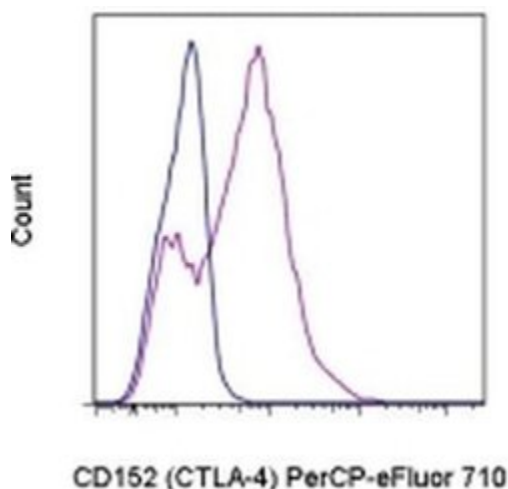
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

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 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD152 (CTLA-4) Monoclonal Antibody (14D3), PerCP-eFluor 710, eBioscience



CD152 (CTLA-4) Antibody (46-1529-42) in Flow

PHA-stimulated human peripheral blood cells were intracellularly stained with Mouse IgG2a K Isotype Control PerCP-eFluor® 710 (Product # 46-4724-82) (blue histogram) or Anti-Human CD152 (CTLA-4) PerCP-eFluor® 710 (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 (5)

Oncotarget

HDAC inhibition potentiates immunotherapy in triple negative breast cancer.

"Published figure using CD152 (CTLA-4) monoclonal antibody (Product # 46-1529-42) in Flow Cytometry"

Authors: Terranova-Barberio M, Thomas S, Ali N, Pawlowska N, Park J, Krings G, Rosenblum MD, Budillon A, Munster PN

Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2017

Frontiers in immunology

Intratumoral FoxP3⁺Helios⁺ Regulatory T Cells Upregulating Immunosuppressive Molecules Are Expanded in Human Colorectal Cancer.

"46-1529 was used in Flow cytometry/Cell sorting to characterise the differences in immune cells in the tumour microenvironment of colorectal cancer patients compared to paired adjacent non-tumour colon tissue of CRC patients."

Authors: Syed Khaja AS, Toor SM, El Salhat H, Ali BR, Elkord E

Species
Human

Dilution
Not Cited

Year
2021

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More applications with references on thermofisher.com

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