

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
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_10805626

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.03 µg)/test	22 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.

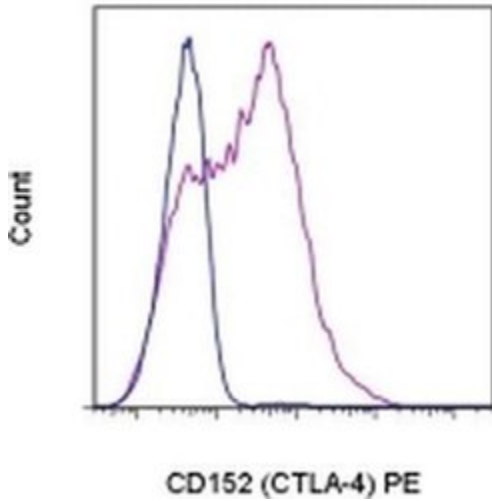
Furthermore, due to the intracellular localization of a large portion of CTLA-4, for complete detection it may be necessary to assess

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 (22)

International journal of nanomedicine

Functionalization-dependent effects of cellulose nanofibrils on tolerogenic mechanisms of human dendritic cells.

"12-1529 was used in Flow cytometry/Cell sorting to investigate how differentially functionalised cellulose nanofibrils affect dendritic cell properties, their viability, morphology, differentiation and maturation potential, and the capacity to regulate T cell-mediated immune response."

Authors: Tomi S, Ili N, Kokol V, Gruden-Movsesijan A, Mihajlovi D, Beki M, Sofroni-Milosavljevi L, oli M, Vuevi D

Species
Human

Dilution
Not Cited

Year
2018

Frontiers in immunology

Schistosoma mansoni rSm29 Antigen Induces a Regulatory Phenotype on Dendritic Cells and Lymphocytes From Patients With Cutaneous Leishmaniasis.

"12-1529 was used in Flow cytometry/Cell sorting to evaluate the potential of the S. mansoni Sm29 antigen to change aspects of profiles of monocyte derived dendritic cells and lymphocytes from subjects with cutaneous leishmaniasis."

Authors: Lopes DM, Oliveira SC, Page B, Carvalho LP, Carvalho EM, Cardoso LS

Species
Human

Dilution
Not Cited

Year
2019

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

Miscellaneous PubMed (1)

JCI insight

Mitochondrial dysregulation and glycolytic insufficiency functionally impair CD8 T cells infiltrating human renal cell carcinoma.

"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."

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

Species
Human

Dilution
Not Cited

Year
2017

More applications with references on thermofisher.com

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