

CD152 (CTLA-4) Monoclonal Antibody (UC10-4B9), PE-eFluor™ 610, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), PE-eFluor™ 610, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	UC10-4B9
Conjugate	PE-eFluor™ 610
Excitation/Emission Max	565/606 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574581

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	16 Publications

Product Specific Information

Description: The UC10-4B9 monoclonal antibody reacts with mouse CD152, also known as the cytotoxic T lymphocyte antigen-4 (CTLA-4). CTLA-4, a protein with structural similarities to CD28, is expressed on activated T cells at low level 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 a large proportion of newly synthesized CTLA-4 in response to TCR signaling to be localized intracellularly.

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.

Applications Reported: This UC10-4B9 antibody has been reported for use in flow cytometric analysis, and intracellular staining followed by flow cytometric analysis.

Applications Tested: This UC10-4B9 antibody has been tested by intracellular staining and flow cytometric analysis of stimulated mouse splenocytes using the FoxP3/Transcription Factor Staining Buffer Set (cat. 00-5523) and protocol. Please refer to Best Protocols: Protocol B: One step protocol for (nuclear) intracellular proteins located under the Resources Tab online. This can be used at less than or equal to 0.5 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

PE-eFluor® 610 can be excited with laser lines from 488-561 nm and emits at 607 nm. We recommend using a 610/20 band pass filter (equivalent to PE-Texas Red®). Please make sure that your instrument is capable of detecting this fluorochrome.

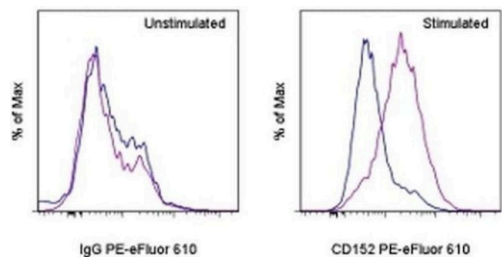
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of 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: 488-561 nm; Emission: 607 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD152 (CTLA-4) Monoclonal Antibody (UC10-4B9), PE-eFluor™ 610, eBioscience™



CD152 (CTLA-4) Antibody (61-1522-82) in Flow
C57Bl/6 splenocytes were unstimulated (left) or stimulated with Con A for 3 days (right). Cells were intracellularly stained with Anti-Mouse CD4 eFluor® 450 (Product # 48-0041-82) and 0.25 µg of Armenian Hamster IgG Isotype Control PE-eFluor® 610 (Product # 61-4888-82) (blue histogram) or 0.25 µg of Anti-Mouse CD152 (CTLA-4) PE-eFluor® 610 (purple histogram) using the Foxp3 /Transcription Factor Staining Buffer Set (Product # 00-5523-00) and protocol. Cells in the CD4+ gate were used for analysis.

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16 References

Flow Cytometry (16)

Theranostics	
HSF1 promotes CD69⁺ Treg differentiation to inhibit colitis progression.	
"Published figure using CD152 (CTLA-4) monoclonal antibody (Product # 61-1522-82) in Flow Cytometry"	
Authors: Yu L,Zhou B,Zhu Y,Li L,Zhong Y,Zhu L,Wang H,Chen H,Xu J,Guo T,Feng L,Wang X,Cai Z,Wang J,Jin H	
Year	
2023	
Frontiers in immunology	
CARD11 gain-of-function mutation drives cell-autonomous accumulation of PD-1⁺ ICOS^{high} activated T cells, T-follicular, T-regulatory and T-follicular regulatory cells.	
"Published figure using CD152 (CTLA-4) monoclonal antibody (Product # 61-1522-82) in Flow Cytometry"	
Authors: Masle-Farquhar E,Jeelall Y,White J,Bier J,Deenick EK,Brink R,Horikawa K,Goodnow CC	
Year	
2023	

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