CD152 (CTLA-4) Monoclonal Antibody (14D3), Brilliant Ultra Violet™ 737, eBioscience™

Product Details	
Size	25 Tests
Species Reactivity	Human, Rhesus monkey
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Brilliant Ultra Violet™ 737, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	14D3
Conjugate	Brilliant Ultra Violet™ 737
Excitation/Emission Max	350/740 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2895996

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	-

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 intracellular staining followed by flow cytometric analysis.

Applications Tested: This 14D3 antibody has been pre-diluted and tested by intracellular staining followed by flow cytometric analysis of stimulated normal human peripheral blood cells using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Please refer to "Staining Intracellular Antigens for Flow Cytometry, Protocol A: Two step protocol for intracellular (cytoplasmic) proteins" located at Flow Protocols. This may be used at 5 µL (0.25 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.

Brilliant Ultra Violet™ 737 (BUV737) is a tandem dye that emits at 732 nm and is intended for use on cytometers equipped with

an ultraviolet (355 nm) laser. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright, Brilliant Violet™, Brilliant Ultra Violet™, or other polymer dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) or Brilliant Stain Buffer (Product # 00-4409-75) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer or Brilliant Stain Buffer for more information.

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

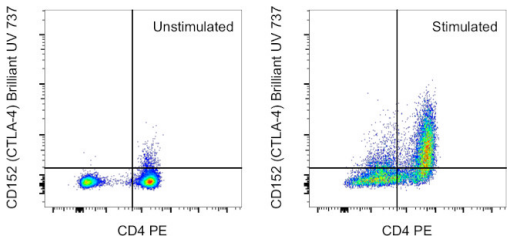
Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Our internal testing suggests that Brilliant Ultra Violet™ 737 (BUV737) is compatible with short-term methanol-based fixation, but should not be stored in buffers containing methanol for longer than one hour.

Excitation: 355 nm; Emission: 732 nm; Laser: Ultraviolet Laser.

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Product Images For CD152 (CTLA-4) Monoclonal Antibody (14D3), Brilliant Ultra Violet™ 737, eBioscience™



CD152 (CTLA-4) Antibody (367-1529-41) in Flow
Normal human peripheral blood cells were unstimulated (left) or stimulated for 72 hours with PHA-L (Product # 00-4977-03) (right). Cells were then stained intracellularly, using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol, with CD4 Monoclonal Antibody, PE (Product # 12-0049-42) and CD152 (CTLA-4) Monoclonal Antibody, Brilliant Ultra Violet 737 (BUV737). Viable cells in the lymphocyte gate were used for analysis, as determined by LIVE/DEAD™ Fixable Violet Dead Cell Stain Kit (Product # L34964).

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