

# CD4 Monoclonal Antibody (RPA-T4), Brilliant Ultra Violet™ 737, eBioscience™

Product Details	
Size	25 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Brilliant Ultra Violet™ 737, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-T4
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_2895926

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	-

## Product Specific Information

**Description:** The RPA-T4 monoclonal antibody reacts with human CD4, a 59 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells (T-helper cells) and in low levels on monocytes. CD4 is a receptor for the human immunodeficiency virus (HIV). RPA-T4 blocks HIV binding and mixed lymphocyte reaction. The RPA-T4 antibody recognizes a different epitope than the OKT4 monoclonal antibody, and these antibodies do not cross-block binding to each other's respective epitopes.

**Applications Reported:** This RPA-T4 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This RPA-T4 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (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 10<sup>5</sup> to 10<sup>8</sup> 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) 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.

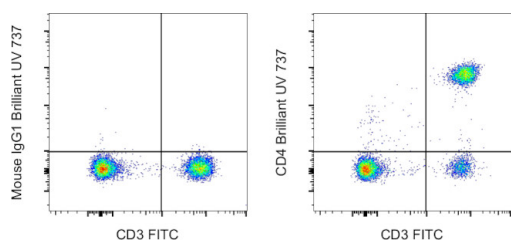
**Fixation:** Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some 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 CD4 Monoclonal Antibody (RPA-T4), Brilliant Ultra Violet™ 737, eBioscience™



### CD4 Antibody (367-0049-41) in Flow

Normal human peripheral blood cells were stained with CD3 Monoclonal Antibody, FITC (Product # 11-0038-42) and Mouse IgG1 kappa Isotype Control, Brilliant Ultra Violet 737 (BUV737) (Product # 367-4714-81) (left) or CD4 Monoclonal Antibody, Brilliant Ultra Violet 737 (BUV737) (right). Viable cells in the lymphocyte gate were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

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