CD2 Monoclonal Antibody (RPA-2.10), Super Bright™ 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Baboon, Chimpanzee, Cynomolgus monkey, Human, Non-human primate, Pig, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RPA-2.10
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 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_2762619

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	1 Publication

Product Specific Information

Description: The RPA-2.10 monoclonal antibody reacts with human CD2, a 50 kDa cell surface receptor expressed by a majority of thymocytes, all mature T cells and subset of NK cells. CD2 is a ligand for CD58 in the human and is involved in adhesion and activation of T cells. RPA-2.10 blocks mixed lymphocyte reaction.

RPA-2.10 crossreacts to non-human primates and pigs.

Applications Reported: This RPA-2.10 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This RPA-2.10 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (0.06 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.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

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

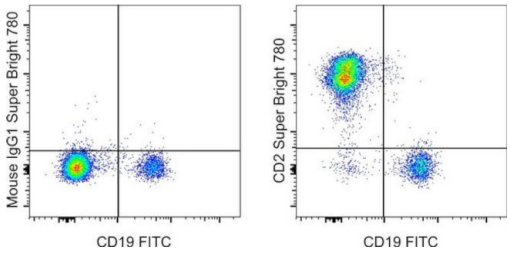
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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: 405 nm; Emission: 780 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD2 Monoclonal Antibody (RPA-2.10), Super Bright™ 780, eBioscience™



CD2 Antibody (78-0029-42) in Flow
Normal human peripheral blood cells were stained with CD19 Monoclonal Antibody, FITC (Product # 11-0199-42) and Mouse IgG1 kappa Isotype Control, Super Bright 780 (Product # 78-4714-82) (left) or CD2 Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis.

1 Reference

Flow Cytometry (1)

Biophysical journal

Constraints on GPCR Heterodimerization Revealed by the Type-4 Induced-Association BRET Assay.

"Published figure using CD2 monoclonal antibody (Product # 78-0029-42) in Flow Cytometry"

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Year
2019