

# CD45 Monoclonal Antibody (HI30), Brilliant Violet™ 711, 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 Violet™ 711, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	HI30
Conjugate	Brilliant Violet™ 711
Excitation/Emission Max	406/711 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_2925567

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	-

## Product Specific Information

**Description:** The HI30 monoclonal antibody reacts with all isoforms of human CD45, also known as Leukocyte Common Antigen (LCA). CD45 is expressed by all hematopoietic cells excluding circulating erythrocytes and platelets. The cytoplasmic portion of CD45 has tyrosine phosphatase enzymatic activity and plays an important role in activation of lymphocytes.

**Applications Reported:** This HI30 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This HI30 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (0.125 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 Violet™ 711 (BV711) is a tandem dye that emits at 713 nm and is intended for use on cytometers equipped with a violet (405 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-4401-42) 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.

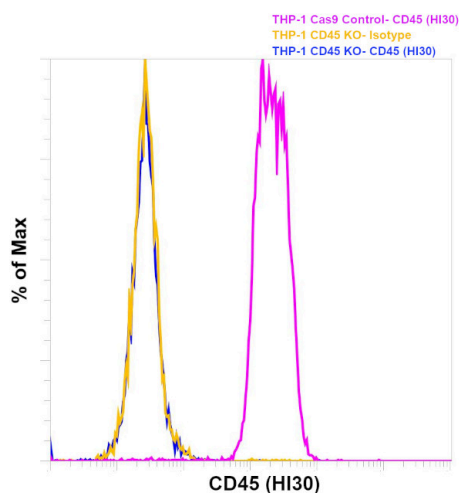
Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone-specific performance should be determined empirically.

Our internal testing suggests that Brilliant Violet™ 711 (BV711) is not compatible with methanol-based fixation.

Excitation: 407 nm; Emission: 713 nm; Laser: Violet Laser.

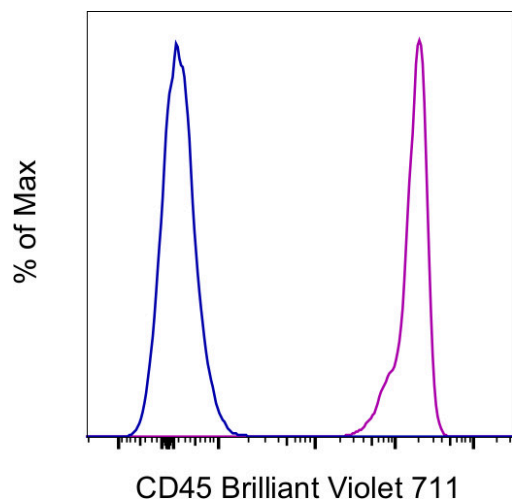
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## Product Images For CD45 Monoclonal Antibody (HI30), Brilliant Violet™ 711, eBioscience™



### CD45 Antibody (407-0459-41)

Antibody clone (HI30) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in HI30 KO cells (blue histogram) compared to the control Cas9 cells (pink histogram) using CD45 antibody (HI30). The Yellow histogram represents staining with the isotype control. {KO}



### CD45 Antibody (407-0459-41) in Flow

Normal human peripheral blood cells were stained with Mouse IgG1 kappa Isotype Control, Brilliant Violet 711 (Product # 407-4714-81) (blue histogram) or CD45 Monoclonal Antibody, Brilliant Violet 711 (purple histogram). Viable cells in the lymphocyte gate were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

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