

CD45 Antibody [clone 2B11] (V2240)

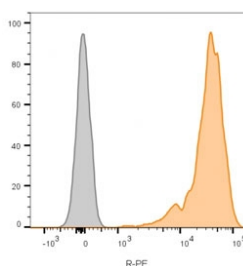
Catalog No.	Formulation	Size
V2240-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2240-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2240SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2240IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml



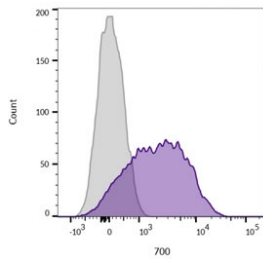
Citations (6)

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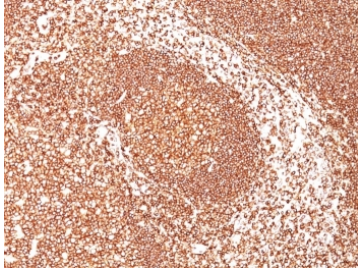
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	2B11
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	5788
Localization	Cell surface and cytoplasmic
Applications	Flow Cytometry : 1-2ug/10 ⁶ cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This CD45 antibody is available for research use only.



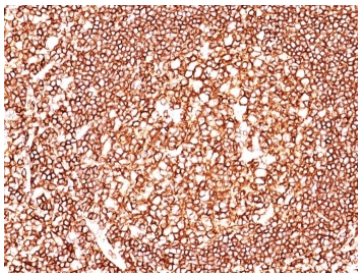
Flow cytometry testing of lymphocyte-gated human PBM cells with CD45 antibody (clone 2B11, orange), and unstained cells (gray).



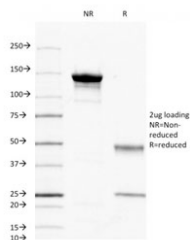
Flow cytometry testing of live Jurkat cells with CD45 antibody (clone 2B11, purple), and unstained cells (gray).



IHC: FFPE human tonsil (10X) stained with CD45 antibody (clone 2B11).



IHC: FFPE human tonsil (20X) stained with CD45 antibody (clone 2B11).



SDS-PAGE Analysis of Purified, BSA-Free CD45 Antibody (clone 2B11). Confirmation of Integrity and Purity of the Antibody.

Description

CD45, also referred to as CD45R and PTPRC (Protein tyrosine phosphatase receptor type C), has been identified as a transmembrane glycoprotein, broadly expressed among hematopoietic cells. Along with other members of the PTP family, it regulates a number of cellular processes including cell differentiation, growth and mitotic cycle, and is an essential regulator of B- and T-cell antigen receptor-mediated activation.

Multiple isoforms of CD45 are distributed throughout the immune system and arise due to alternative splicing of exons located in the N-terminus. CD45RA contains the A exon and is a naive T-cell marker which may help prevent autoimmune disease. CD45RB contains B and stains most leukemias and lymphomas. CD45RC contains C and stains thymocytes, monocytes and dendritic cells. CD45RO doesn't contain A, B or C and is a marker of activated T-cells that can be used to classify and diagnose and classify lymphomas. Clone 2B11 antibody will bind to all CD45 isoforms. The variation in these isoforms is localized to the extracellular domain, with the intracellular domain being conserved. Antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-hematopoietic undifferentiated neoplasms.

Application Notes

Due to variation in protocol and secondary antibody used, the CD45 antibody may need to be titrated for optimal performance.

1. FFPE staining requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Isolated neoplastic cells

Storage

Store the CD45 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (2)