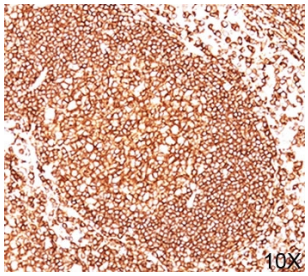
CD45 Antibody Cocktail [clone 2B11 + PD7/26] (V2243)

Catalog No.	Formulation	Size
V2243-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2243-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2243SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2243IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

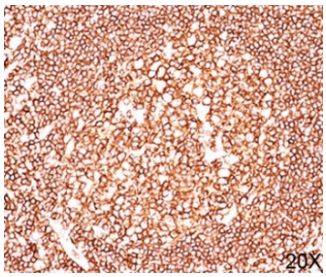
Citations (11)

Bulk quote request

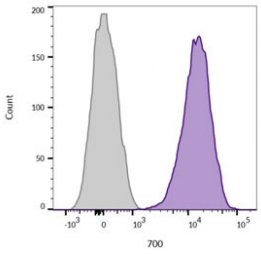
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	2B11 + PD7/26
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	5788
Localization	Cell surface and cytoplasmic
Applications	Flow Cytometry : 0.5-2ug/10^6 cells Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This **CD45 antibody cocktail** is available for research use only.



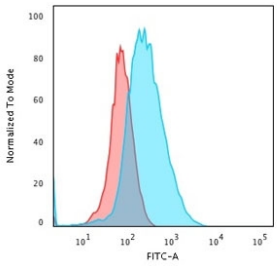
IHC testing of human tonsil (10X) stained with CD45 antibody cocktail (2B11 + PD7/26).



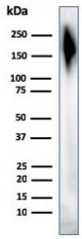
IHC testing of human tonsil (20X) stained with CD45RB antibody cocktail (2B11 + PD7/26).



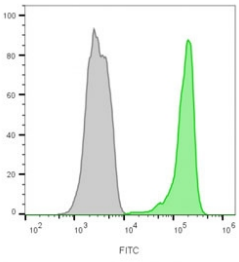
Flow cytometry testing of live human Jurkat cells with CD45 antibody cocktail (clone 2B11 + PD7/26); Gray=isotype control, Purple= CD45 antibody cocktail.



Flow cytometry testing of PFA-fixed human Jurkat cells with CD45 antibody cocktail (clone 2B11 + PD7/26); Red=isotype control, Blue= CD45 antibody cocktail antibody.



Western blot testing of human spleen tissue lysate with CD45 antibody cocktail.



Flow cytometry testing of lymphocyte-gated human PBM cells with CF488-labeled CD45 antibody cocktail (clone 2B11, green), and unstained cells (gray).

Description

CD45 antibody clones 2B11 + PD7/26 are monoclonal antibodies that together recognize the common leukocyte antigen CD45, a tyrosine phosphatase expressed on nearly all hematopoietic cells except mature erythrocytes and platelets. CD45 is critical for antigen receptor signaling in lymphocytes, regulating both T cell and B cell activation thresholds. Because of its ubiquitous expression on leukocytes, CD45 serves as a fundamental marker for hematopoietic cells in immunology and pathology. NSJ Bioreagents provides CD45 antibody clones 2B11 + PD7/26 for reliable detection of this essential immune regulator.

CD45 antibody clones 2B11 + PD7/26 produce strong membranous staining across lymphoid and myeloid cells. Their

combined use ensures broad recognition of CD45 isoforms, covering splice variants that differ among leukocyte subsets. This makes them especially valuable in tissue and cell based studies where comprehensive detection of hematopoietic cells is required.

In diagnostic pathology, CD45 antibody clones 2B11 + PD7/26 are standard markers for confirming hematopoietic origin in tumors. They are widely used to distinguish lymphomas and leukemias from non hematopoietic malignancies such as carcinomas and sarcomas. The consistent expression of CD45 across leukocytes makes these clones indispensable in classifying hematologic neoplasms.

In immunology research, CD45 antibody clones 2B11 + PD7/26 support studies of signaling and activation. CD45 modulates Src family kinases and is essential for antigen receptor signaling cascades. By detecting CD45, researchers can track immune cell development, activation, and function. These clones have been used in studies ranging from thymocyte maturation to memory B cell responses.

The antibody pair has also been applied in transplantation and immunotherapy research, where monitoring CD45 expression aids in tracking immune reconstitution, graft composition, and therapeutic targeting of leukocytes. Their broad reactivity provides consistent results across diverse experimental systems.

CD45 antibody clones 2B11 + PD7/26 have a strong publication record, demonstrating reproducibility across immunology and clinical research. Alternate names include leukocyte common antigen antibody, protein tyrosine phosphatase receptor type C antibody, and hematopoietic cell marker CD45 antibody.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD 45 antibody cocktail to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, 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 from T cell lymphoma were used as the immunogen for clone 2B11 and human peripheral blood lymphocytes maintained in Tcell growth factor were used as the immunogen for clone PD7/26.

Storage

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

References (2)