P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

CD45; Clone 2B11
(Concentrate)

Availability/Contents:

Item #	Volume
A00129-C	1 ml

Description:

Species:	Mouse
Immunogen:	Neoplastic cells from T-Cell lymphoma were used as the immunogen for the CD45 2B11 antibody.
Clone:	2B11
Isotype:	Mouse IgG1, Kappa
Format:	This antibody is provided in a phosphate buffered saline containing 1% BSA.
Specificity:	This antibody is specific for hematopoietic cells, including basophils, granulocytes, lymphocytes, macrophages / histiocytes, mast cells, monocytes, plasma cells; NOT mature red blood cells and their immediate progenitors, platelets or megakaryocytes, dendritic cells, medullary thymocytes.
Background:	The CD45-2B11 monoclonal antibody reacts with 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 lymphocyte proliferation and differentiation. CD45, a transmembrane multifunctional glycoprotein, is a member of the Type I receptor-linked PTPase family. Its physiological functions include T and B Cell activation and proliferation, negative regulation of T and B Cell antigen receptor signaling and cytokine-receptor signaling, negative regulation of IL-3 mediated cellular proliferation, EPO-dependant homeopoiesis and anti-viral responses, regulation of integrin-mediated adhesion and migration of immune cells, chemokine-induced T-cell chemotaxis, MHC-II signaling, IgE mediated degranulation in mast cells, CD40L-induced microglial activation and IL-4 mediated IgE class switch recombination in B cells. Loss of CD45 has been implicated in SCID, Alzheimer's disease and multiple sclerosis. The 2B11 antibody is useful for recognition of normal and neoplastic lymphoid cells.
Species Reactivity:	Human.
Positive Control:	Tonsil.
Cellular Localization:	Cell Membrane/ Membrane raft.
Titer/ Working Dilution:	Immunhisotochemistry 1:100 - 1:200
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

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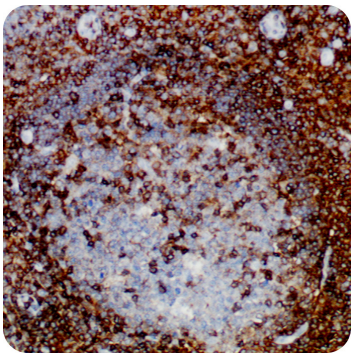
Uses/Limitations:

Not to be taken internally.
For Research Use only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile.



Human Tonsil stained with Ultra-Tek HRP and DAB Chromogen.

Ordering Information and Current Pricing at www.scytek.com

Procedure:

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Altin JG, Sloan EK.The role of CD45 and CD45-associated molecules in T cell activation. Immunol Cell Biol. 1997;75(5):430-45.
2. Dahlke MH, Larsen SR, Rasko JE, Schlitt HJ. The biology of CD45 and its use as a therapeutic target Leuk Lymphoma. 2004;45(2):229-36.
3. Penninger JM, Irie-Sasaki J, Sasaki T, Oliveira-dos-Santos AJ. CD45: new jobs for an old acquaintance. Nat Immunol. 2001 May;2(5):389-96.
4. Tchilian EZ, Beverley PC. CD45 in memory and disease. Arch Immunol Ther Exp (Warsz). 2002;50(2):85-93.

Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C – 8° C

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