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, Leucocyte Common Antigen (LCA); Clones PD7/26 & 2B11

Catalog Number	Format	Volume
A00017-0002	(Ready-To-Use)	2 ml
A00017-0007	(Ready-To-Use)	7 ml
A00017-0025	(Ready-To-Use)	25 ml
A00017-C.1	(Concentrate)	0.1 ml
A00017-C	(Concentrate)	1 ml

Intended Use

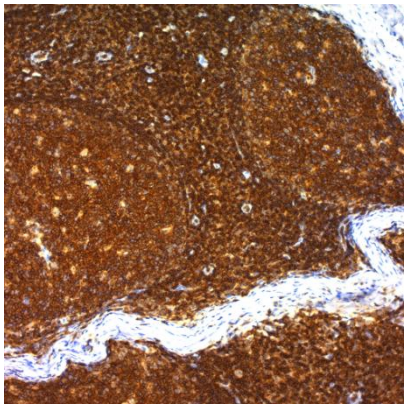
For In Vitro Diagnostic use. This antibody is intended for the qualitative visualization of the anatomical elements listed in the Specificity section. It is intended to be used within an Immunohistochemistry (IHC) procedure on formalin-fixed paraffin-embedded (FFPE) human tissue followed by visualization by light microscopy. Any diagnostic interpretation of the results of this antibody is to be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

Description

Titer/Working Dilution: Ready-to-Use: No further dilution required.
Concentrate: Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml

Flow Cytometry:	0.5-1 µg/million cells
Immunofluorescence:	0.5-1 µg/ml
Western Blotting:	0.5-1 µg/ml
Immunoprecipitation:	0.5-1 µg/500µg protein lysate

Species: Mouse
Immunogen: Isolated neoplastic cells from T-cell lymphoma (2B11); human peripheral blood lymphocytes maintained in T-cell growth factor (PD7/26).
Clone: 2B11 & PD7/26
Isotype: IgG1, kappa (2B11); IgG1, kappa (PD7/26).
Entrez Gene ID: 5788 (Human)
Hu Chromosome Loc.: 1q31.3
Synonyms: B220, CD45R, GP180, Leukocyte common antigen (LCA), Loc, Ly-5, Lyt-4, Protein tyrosine phosphatase receptor type C (PTPRC), Receptor-type tyrosine-protein phosphatase C, T200 glycoprotein.
Mol. Wt. of Antigen: 180-220kDa
Format: Ready-To-Use antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-embedded tissue sections. No further titration is required.
Concentrate antibody is provided at 200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% Sodium Azide.
Specificity: This antibody recognized the CD45 leukocyte common antigen (LCA) family.
Background: The LCA family is comprised of at least four isoforms of membrane glycoproteins (220, 205, 190, 180kDa) expressed on hematopoietic cell lines, but absent on non-hematopoietic cell lines, and normal and malignant non-hematopoietic tissues. The intracellular portions of these molecules have protein phosphatase activity and are involved in regulation of transmembrane signals. This antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-hematopoietic undifferentiated neoplasms. A positive result with this antibody is highly indicative of lymphoid or myeloid origin. Certain types of lymphoid neoplasms may lack CD45 (Hodgkin lymphoma, some T-cell lymphomas, and some leukemias), so its absence does not rule out a hematolymphoid tumor. CD45 is expressed almost exclusively by cells of hematopoietic lineage and is present in most benign and malignant lymphocytes as well as plasma cell precursors.
Species Reactivity: Human, Others-not known
Positive Control: Ramos, U-698, or GA-10 cells. Tonsil.
Cellular Localization: Cell surface and cytoplasmic
Microbiological State: Nonsterile.



Formalin-fixed, paraffin-embedded human tonsil (200x) stained with CD45 / LCA; Clone PD7/26 & 2B11

Materials and Reagents Required but not Provided

1. Control tissue and reagents
2. Xylene, graded alcohols, and deionized/distilled water
3. Antibody Diluent.
4. IHC detection system. Suggested: ScyTek Cat# ABZ125 "CRF Anti-Polyvalent HRP Polymer" and ScyTek Cat# ACV500 "DAB Chromogen/Substrate Kit (High Contrast)".
5. Wash buffer for rinses (ScyTek Cat# TBT500)
6. HIER Retrieval Solution
7. Hematoxylin counterstain and bluing reagent (ScyTek Cat# HMM500 and BRT500)
8. Mounting medium and coverslips

Note: ScyTek Laboratories has a wide range of IHC reagents and ancillaries that can be found at scytek.com.

Procedure

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with pH 8-9 HIER Solution (see ScyTek catalog# ETA or TES for instructions).

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

Storage: 2° C 8° C

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the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Storage and Stability

Do not Freeze. Store at 2-8°C. Return to 2-8° immediately after use. Do not use after expiration date printed on label. Verify visually that antibody has not been contaminated before use. Do not use if reagent becomes cloudy or precipitates.

Limitations

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. This data sheet's recommendations and procedures were validated using ScyTek IHC reagents and may not be suitable for other detection systems.

Precautions

1. Contains Sodium Azide as a preservative (0.09% w/v), do not ingest. Sodium Azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. 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.
2. Do not pipette by mouth.
3. Avoid contact of reagents and specimens with skin and mucous membranes.
4. Avoid microbial contamination of reagents or increased nonspecific staining may occur.
5. The user must validate any procedures and recommendations that differ from this data sheet.
6. The SDS may be found at scytek.com

References

1. Gatter KC et. al. Lancet, 1985 Jun 8, 1(8441):1302-5.
2. Michie SA et. al. American Journal of Clinical Pathology, 1987, 88(4):457-62.

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.

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