

CD45 RO (UCLH-1)

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 006 B, C	0.5, 1.0 mL	1:100
Prediluted	GB 006 AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

The 180 kDa protein known as CD45RO, or the isoform of leukocyte common antigen, is what the CD45RO antibody is able to detect. Reactions with mature activated T-cells, the majority of thymocytes, and a subset of resting T-cells within CD4 and CD8 subsets have been observed in studies using the CD45RO antibody. Purportedly, normal T-cells and T-cell lymphomas can be identified using the UCHL-1 clone of the CD45RO antibody. While UCHL-1 does react with granulocytes and monocytes, it does not react with normal B-cells or natural killer cells, according to other research.

INTENDED USE -

The CD45RO [UCHL-1] mouse monoclonal antibody is designed for in vitro diagnostic use in human FFPE tissues for the purpose of qualitatively identifying the ubiquitin carboxylterminal hydrolase isozyme L1 protein through immunohistochemistry (IHC). A trained pathologist should review the patient's medical history and other diagnostic tests in conjunction with morphological investigations employing appropriate controls to supplement the clinical interpretation of staining or lack thereof.

SUMMARY AND EXPLANATION -

According to the 4th Leukocyte Typing Workshop (Code No. N31), an isoform of the leukocyte common antigen (CD45RO) is recognized by CD45RO, a protein with a molecular weight of 180 kDa. UCHL-1 interacts with a subset of resting T-cells among the CD4 and CD8 subsets, as well as with most thymocytes and mature activated T-cells. UCHL-1 binds to monocytes and granulocytes but has no effect on normal B cells or natural killer cells. The ability to distinguish between healthy T-cells and T-cell lymphomas has been associated with UCHL-1.

PRINCIPLES OF PROCEDURE -

Immunohistochemistry is a multi-step method that can be used to detect antigens in cells and tissues. The primary antibody is bound to its specific epitope in the initial

stage. To bind to an antigen that has been previously labeled with a primary antibody, a secondary antibody is introduced. After that, the secondary antibody is attached with an enzyme label, and a colorimetric reaction shows that the bound antibody has been detected.

SOURCE- Mouse monoclonal

SPECIES REACTIVITY -Human; others not tested

CLONE - UCHL-1

ISOTYPE - IgG2a/kappa

TOTAL PROTEIN CONCENTRATION - ~10 mg/ml. Call for lot specific Ig concentration.

EPITOPE/ ANTIGEN - CD45RO

CELLULAR LOCALIZATION - Cell membrane

POSITIVE TISSUE CONTROL - Tonsil or T-cell lymphoma

KNOWN APPLICATIONS - Immunohistochemistry 30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with protein carrier and preservative

STORAGE AND STABILITY -

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Materials required but not provided -

- 1) Positive tissue control - Tonsil or T-cell lymphoma
- 2) Negative control tissue (internal or external)
- 3) Microscope slides and coverslips
- 4) Staining jars or baths
- 5) Timer
- 6) Xylene or xylene substitute
- 7) Ethanol or reagent alcohol

- 8) Deionized or distilled water
- 9) Heating equipment or enzyme for tissue pretreatment step
- 10) Detection system
- 11) Chromogen
- 12) Wash buffer
- 13) Hematoxylin
- 14) Antibody diluents
- 15) Peroxide block
- 16) Light microscope
- 17) Mounting medium

LIMITATIONS-

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.