

### 36-3494: Anti-CD5 (Mantle Cell Lymphoma Marker) Monoclonal Antibody(Clone: CD5/2416)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CD5/2416
<b>Application :</b>	FACS,WB,IF,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	CD5
<b>Gene ID :</b>	921
<b>Uniprot ID :</b>	P06127
<b>Alternative Name :</b>	CD5 antigen (p56 62), LEU1, Ly12, LyA, Lymphocyte antigen T1/Leu-1, Lymphocyte glycoprotein T1/Leu1, T-cell surface glycoprotein CD5
<b>Isotype :</b>	Mouse IgG2b, kappa
<b>Immunogen Information :</b>	Recombinant fragment of human CD5 protein (around aa 269-366) (exact sequence is proprietary)

#### Description

Recognizes a 67kDa transmembrane protein, which is identified as CD5. The CD5 antigen is found on 95% of thymocytes and 72% of peripheral blood lymphocytes. In lymph nodes, the main reactivity is observed in T cell areas. Anti-CD5 is a pan T-cell marker that also reacts with a range of neoplastic B-cells, e.g. chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL), mantle cell lymphoma, and a subset (~10%) of diffuse large B-cell lymphoma. CD5 aberrant expression is useful in making a diagnosis of mature T-cell neoplasms. Anti-CD5 detection is diagnostic in CLL/SLL within a panel of other B-cell markers, especially one that includes anti-CD23. Anti-CD5 is also very useful in differentiating among mature small lymphoid cell malignancies. In addition, anti-CD5 can be used in distinguishing thymic carcinoma (+) from thymoma (-). Anti-CD5 does not react with granulocytes or monocytes.

#### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

#### Application Note

Flow Cytometry (1-2ug/million cells); Western Blot (1-2ug/ml); Immunofluorescence (1-2ug/million cells); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT), (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

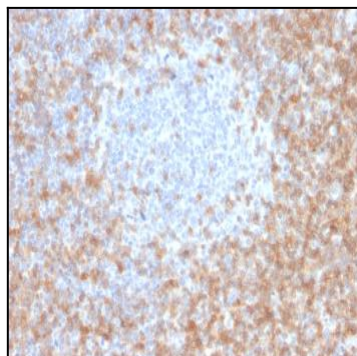


Fig. 1: Formalin-fixed, paraffin-embedded human Tonsil stained with CD5-Monospecific Mouse Monoclonal Antibody (CD5/2416).

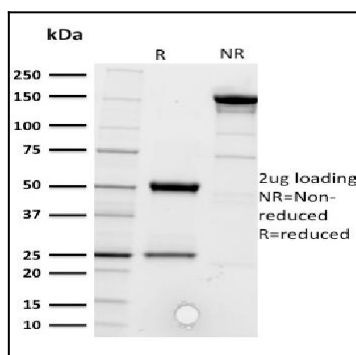


Fig. 2: SDS-PAGE Analysis Purified CD5-Monospecific Mouse Monoclonal Antibody (CD5/2416). Confirmation of Purity and Integrity of Antibody.

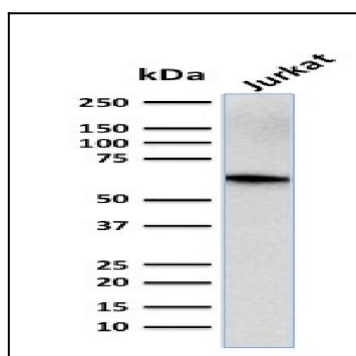


Fig. 3: Western Blot Analysis of human Jurkat cell lysate using CD5-Monospecific Mouse Monoclonal Antibody (CD5/2416).

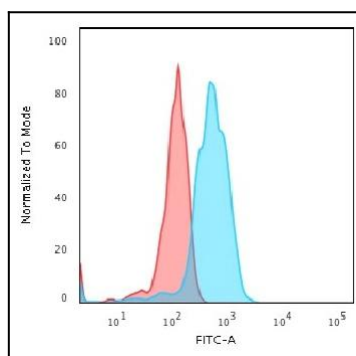


Fig. 4: Flow Cytometric Analysis of human Jurkat cells using CD5-Monospecific Mouse Monoclonal Antibody (CD5/2416) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

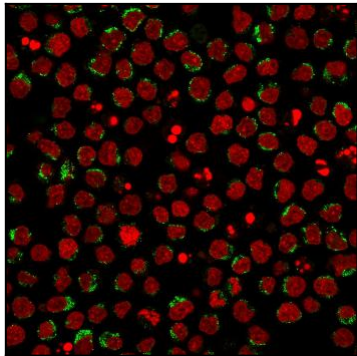


Fig. 5: Immunofluorescent staining of PFA-fixed Ramos cells using CD5-Monospecific Mouse Monoclonal Antibody (CD5/2416) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.

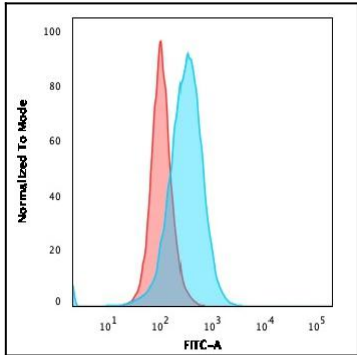


Fig. 6: Flow Cytometric Analysis of Ramos cells using CD5-Monospecific Mouse Monoclonal Antibody (CD5/2416) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

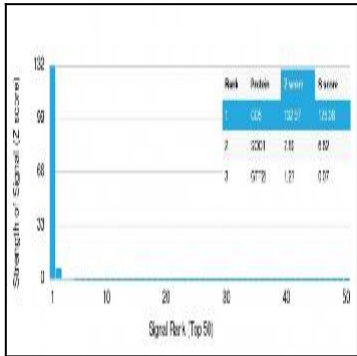


Fig. 7: Analysis of Protein Array containing more than 19,000 full-length human proteins using Mouse CD5-Monospecific Monoclonal Antibody (CD5/2416) Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.