**BACKGROUND**

CD5 (also designated Lyt-1) has been identified as a transmembrane glycoprotein that is expressed on 70% of normal peripheral blood lymphocytes and on virtually all T lymphocytes in thymus and peripheral blood. Activation of T cells through the T cell receptor (TCR) results in tyrosine phosphorylation of CD5, and the absence of CD5 renders T cells hyper-responsive to TCR-mediated activation. CD5 associates with the TCR/CD3-ζ chain and with the Src family kinase Lck p56. *In vitro* studies have shown a 10- to 15-fold increase in the kinase activity of Lck bound to CD5. The B cell antigen, CD72, serves as a receptor for CD5. The consequence of CD5 binding to its cognate receptor is still in question and likely plays a role in thymic selection.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CD5 (human) mapping to 11q12.2.

**SOURCE**

CD5 (L17F12) is a mouse monoclonal antibody raised against human T-acute lymphoblastic leukemia (ALL) cells.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD5 (L17F12) is available conjugated to either phycoerythrin (sc-18898 PE) or fluorescein (sc-18898 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

**APPLICATIONS**

CD5 (L17F12) is recommended for detection of CD5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for CD5 siRNA (h): sc-35011, CD5 shRNA Plasmid (h): sc-35011-SH and CD5 shRNA (h) Lentiviral Particles: sc-35011-V.

Molecular Weight of CD5: 67 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, Daudi cell lysate: sc-2415 or HuT 78 whole cell lysate: sc-2208.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG AC-FITC: sc-516140 or m-IgG PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

CD5 (L17F12): sc-18898. Western blot analysis of CD5 expression in 293T whole cell lysate.

CD5 (L17F12): sc-18898. Immunofluorescence staining of methanol-fixed MOLT-4 cells showing membrane localization.

CD5 (L17F12) FITC: sc-18898. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG2a: sc-2856.

CD5 (L17F12) PE: sc-18898 PE. FCM analysis of SUP-T1 cells. Black line histogram represents the isotype control, normal mouse IgG2a: sc-2856.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.