

9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

## 30-1493: Anti-CD5 Monoclonal Antibody (Clone:L17F12)

Clonality: Monoclonal **Clone Name:** L17F12 FACS.WB Application: Reactivity: Human Gene: CD5 Gene ID: 921 **Uniprot ID:** P06127 **Purified** Format: **Alternative Name:** CD5,LEU1 Isotype: Mouse IgG2a

Immunogen Information: Human acute lymphoblastic leukemia (ALL) T cells

## **Description**

CD5 antigen (T1; 67 kDa) is a human cell surface T-lymphocyte single-chain transmembrane glycoprotein. CD5 is expressed on all mature T-lymphocytes, most of thymocytes, subset of B-lymphocytes and on many T-cell leukemias and lymphomas. It is a type I membrane glycoprotein whose extracellular region contains three scavenger receptor cysteine-rich (SRCR) domains. The CD5 is a signal transducing molecule whose cytoplasmic tail is devoid of any intrinsic catalytic activity. CD5 modulates signaling through the antigen-specific receptor complex (TCR and BCR). CD5 crosslinking induces extracellular Ca++ mobilization, tyrosine phosphorylation of intracellular proteins and DAG production. Preliminary evidence shows protein associations with ZAP-70, p56lck, p59fyn, PC-PLC, etc. CD5 may serve as a dual receptor, giving either stimulatory or inhibitory signals depending both on the cell type and development stage. In thymocytes and B1a cells seems to provide inhibitory signals, in peripheral mature T lymhocytes it acts as a costimulatory signal receptor. CD5 is the phenotypic marker of a B cell subpopulation involved in the production of autoreactive antibodies. Disease relevance: CD5 is a phenotypic marker for some B cell lymphoproliferative disorders (B-CLL, Hairy cell leukemia, etc.). The CD5+ popuation is expanded in some autoimmune disorders (Rheumatoid Arthritis, etc.). Herpes virus infections induce loss of CD5 expression in the expanded CD8+ human T cells.

## **Product Info**

Amount: 0.1 mg

**Purification:** Purified by protein-A affinity chromatography

**Storage condition:** Store at 2-8°C. Do not freeze.

## **Application Note**

Flow cytometry: Recommended dilution: 1-4 µg/ml.

Western blotting: Laurylmaltoside lysing buffer; non-reducing conditions; recommended dilution: 1-2 µg/ml.