

### 30-1910: Anti-CD5 Monoclonal Antibody (Clone:L17F12)-Biotin Conjugated

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| <b>Clonality :</b>             | Monoclonal                                       |
| <b>Clone Name :</b>            | L17F12   |
| <b>Application :</b>           | FACS, IP, WB, ICC                                |
| <b>Reactivity :</b>            | Human  |
| <b>Conjugate :</b>             | Biotin   |
| <b>Gene :</b>                  | CD5  |
| <b>Gene ID :</b>               | 921  |
| <b>Uniprot ID :</b>            | P06127   |
| <b>Alternative Name :</b>      | CD5,LEU1   |
| <b>Isotype :</b>               | Mouse IgG2a                                      |
| <b>Immunogen Information :</b> | 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 lymphocytes 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+ population 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

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| <b>Amount :</b>            | 0.1 mg                         |
| <b>Storage condition :</b> | Store at 2-8°C. Do not freeze. |