

### 30-1110: Anti-CD5 / T1 Monoclonal Antibody (Clone:MEM-32)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MEM-32
<b>Application :</b>	ELISA,IHC,FACS,WB
<b>Reactivity :</b>	Human
<b>Gene :</b>	CD5
<b>Gene ID :</b>	921
<b>Uniprot ID :</b>	P06127
<b>Format :</b>	Purified
<b>Alternative Name :</b>	CD5,LEU1
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	Crude thymus membrane fraction.

#### 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

<b>Amount :</b>	0.1 mg
<b>Purification :</b>	Purified by protein-A affinity chromatography
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

#### Application Note

ELISA: The antibody MEM-32 can be used in the Sandwich ELISA as the capture antibody in pair with the detection antibody CRIS1.

Immunohistochemistry (paraffin sections): Recommended dilution: 20 µg/ml; positive tissue: spleen.

Flow cytometry: Recommended dilution: 2 µg/ml.

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