

30-2337: Anti-CD5 Monoclonal Antibody (Clone:L17F12)-PE Conjugated

Clonality :	Monoclonal
Clone Name :	L17F12
Application :	FACS, IP, WB, ICC
Reactivity :	Human
Conjugate :	PE
Gene :	CD5
Gene ID :	921
Uniprot ID :	P06127
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 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

Amount :	100 tests
Storage condition :	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

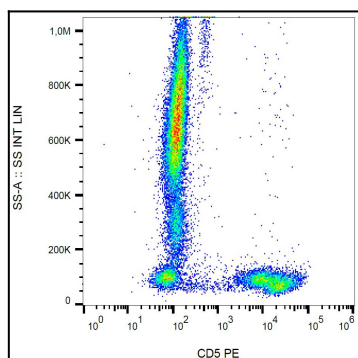


Figure 1: Surface staining of CD5 in human peripheral blood cells with anti-CD5 (L17F12) PE.