

30-1734: Anti-CD5 Monoclonal Antibody (Clone:CRIS1)-APC Conjugated

Clonality :	Monoclonal
Clone Name :	CRIS1
Application :	FACS
Reactivity :	Human
Conjugate :	APC
Gene :	CD5
Gene ID :	921
Uniprot ID :	P06127
Alternative Name :	CD5,LEU1
Isotype :	Mouse IgG2a
Immunogen Information :	stimulated human leukocytes

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.

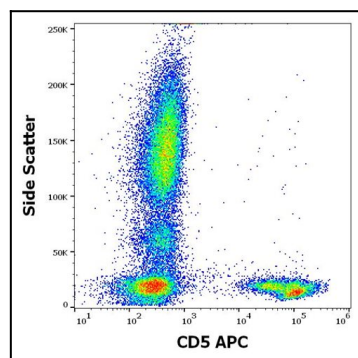


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD5 (CRIS1) APC antibody (concentration in sample 0.22 µg/ml).

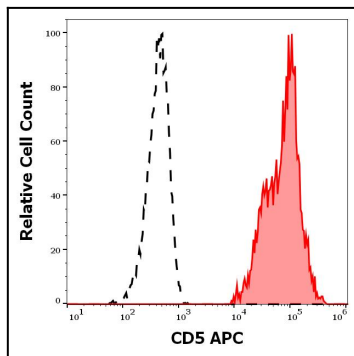


Figure 2: Separation of human CD5-positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD5 (CRIS1) APC antibody (concentration in sample 0.22 $\mu\text{g/ml}$).