

ARG53867 anti-CD5 antibody [CRIS1] (APC)

Package: 100 tests
Store at: 4°C

Summary

Product Description	APC-conjugated Mouse Monoclonal antibody [CRIS1] recognizes CD5
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone CRIS1 reacts with the cell surface glycoprotein CD5, a 67kDa single-chain transmembrane glycoprotein expressed on mature T lymphocytes, most of thymocytes and B lymphocytes subset (B-1a lymphocytes). HLDA I; WS Code T 29 HLDA III; WS Code T 530
Host	Mouse
Clonality	Monoclonal
Clone	CRIS1
Isotype	IgG2a
Target Name	CD5
Species	Human
Immunogen	stimulated human leukocytes
Conjugation	APC
Alternate Names	CD antigen CD5; Lymphocyte antigen T1/Leu-1; LEU1; T-cell surface glycoprotein CD5; T1

Application Instructions

Application table	Application	Dilution
	FACS	10 µl / 10 ⁶ cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 921 Human](#)

[Swiss-port # P06127 Human](#)

Gene Symbol

CD5

Gene Full Name

CD5 molecule

Background

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.

Function

May act as a receptor in regulating T-cell proliferation. [UniProt]

Research Area

Developmental Biology antibody; Immune System antibody

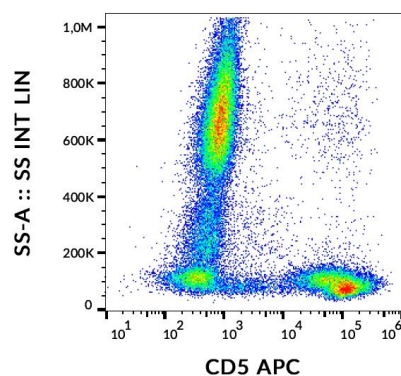
Calculated Mw

55 kDa

PTM

Phosphorylated on tyrosine residues by LYN; this creates binding sites for PTPN6/SHP-1.

Images



ARG53867 anti-CD5 antibody [CRIS1] (APC) FACS image

Flow Cytometry: Human peripheral blood stained with ARG53867 anti-CD5 antibody [CRIS1] (APC).