

ARG62878 anti-CD5 antibody [CRIS1] (FITC)

Package: 100 tests
Store at: 4°C

Summary

Product Description	FITC-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	FITC
Alternate Names	CD antigen CD5; Lymphocyte antigen T1/Leu-1; LEU1; T-cell surface glycoprotein CD5; T1

Application Instructions

Application table	Application	Dilution
	FACS	20 µl / 10 ⁶ cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

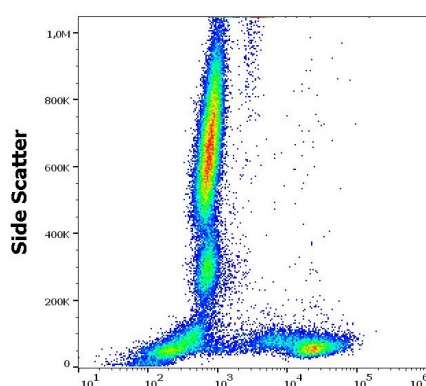
Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC 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.

Bioinformation

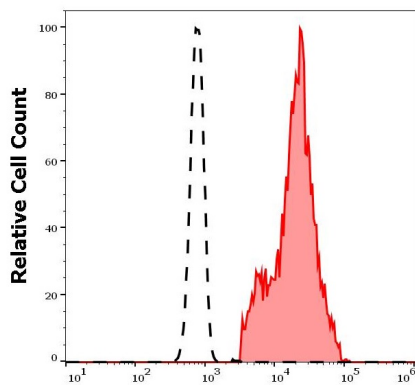
Database links	GeneID: 921 Human Swiss-port # P06127 Human
Gene Symbol	CD5
Gene Full Name	CD5 molecule
Background	<p>CD5 antigen (T1; 67 kDa) is a human cell surface T-lymphocyte single-chain transmembrane glycoprotein. CD5 is expressed on all mature T-lymphocytes, most of thymocytes, subset of B-lymphocytes 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.</p> <p>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.</p>
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



ARG62878 anti-CD5 antibody [CRIS1] (FITC) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG62878 anti-CD5 antibody [CRIS1] (FITC) (20 µl reagent / 100 µl of peripheral whole blood).



ARG62878 anti-CD5 antibody [CRIS1] (FITC) FACS image

Flow Cytometry: Separation of human CD5 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG62878 anti-CD5 antibody [CRIS1] (FITC) (20 µl reagent / 100 µl of peripheral whole blood).