

Product datasheet for AM03103PU-N

CD5 Mouse Monoclonal Antibody [Clone ID: CRIS1]

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Product data:

Product Type: Primary Antibodies

Clone Name: CRIS1

Applications: ELISA, FC, IHC, IP, WB

Recommended Dilution: Immunoprecipitation.

Flow cytometry: 1 µg/ml

Positive Control:

Peripheral Blood Lymphocytes (PBL) Jurkat human leukemia T-cell line. HPB human leukemia T-cell line. MOLT-4 human leukemia T-cell line.

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

Positive Control:

Jurkat human leukemia T-cell line. HPB human leukemia T-cell line.

Immunohistochemistry (Frozen sections).

ELISA: Can be used in the Sandwich ELISA as the detection antibody in pair with the capture

antibody MEM-32.

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Stimulated human leukocytes.

Specificity: The antibody 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).

Formulation: PBS, pH 7.4 with 15 mM sodium azide as preservative.

State: Aff - Purified

State: Liquid purified IgG fraction (> 95% pure by SDS-PAGE).

Concentration: lot specific





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Purification: Affinity Chromatography on Protein-A.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: CD5 molecule

Database Link: Entrez Gene 921 Human

P06127

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 lymhocytes it acts as a costimulatory signal receptor. CD5 is the phenotypic marker of a B cell subpopulation involved in the production of autoreactive

antibodies.

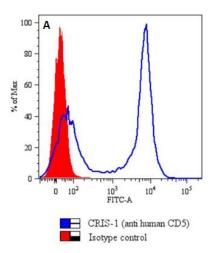
Disease relevance: CD5 is a phenotypic marker for some B cell lymphoproliferative disorders (B-CLL, Hairy cell leukemia, etc.). The CD5+ popuation is expanded in some autoimmune disorders (Rheumatoid Arthritis, etc.). Herpes virus infections induce loss of CD5 expression in

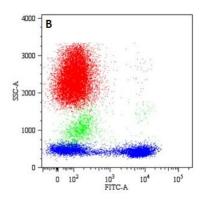
the expanded CD8+ human T cells.

Synonyms: CD5, LEU1



Product images:





Flow Cytometry analysis of human Peripheral Blood Lymphocytes (PBL) stained with CRIS1 antibody (dilution of purified antibody 1 ug/ml); Fig. A:Histogram - gated on lymphocytes, overlay with isotypic control (mouse IgG2a); Fig. B Dot plot.

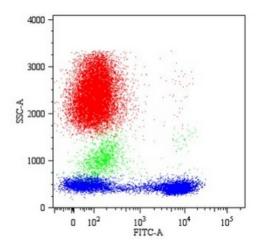


Figure 2. Flow Cytometry analysis -Dot plot.