

Product datasheet for **AM03103AC-N**

CD5 Mouse Monoclonal Antibody [Clone ID: CRIS1]

Product data:

| | |
|-----------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | CRIS1 |
| Applications: | FC |
| Recommended Dilution: | Flow Cytometry analysis of blood cells using 10 µl reagent / 100 µl of whole blood or 10e6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests. |
| Reactivity: | Human |
| Host: | Mouse |
| Isotype: | IgG2a |
| Clonality: | Monoclonal |
| Immunogen: | Stimulated human leukocytes |
| Specificity: | This antibody 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: | Phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent Label: APC Label: Conjugated with cross-linked Allophycocyanin under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use |
| Conjugation: | APC |
| Storage: | Store the antibody at 2 - 8 °C. DO NOT FREEZE! Centrifuge vial before opening. This product is photosensitive and should be protected from light. |
| Stability: | Shelf life: one year from despatch. |
| Gene Name: | CD5 molecule |
| Database Link: | Entrez Gene 921 Human P06127 |



[View online »](#)

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.

Synonyms:

CD5, LEU1