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## AM08111RP-N Monoclonal Antibody to CD5 - PE

Alternate names: LEU-1, LEU1, Ly-1, Lymphocyte antigen T1/Leu-1, Lyt-1, T-cell surface glycoprotein CD5

Quantity: 0.1 mg
Concentration: 0.1 mg/ml

Background: In humans, CD5 is a 55kDa T lymphocyte single chain transmembrane glycoprotein. It

is present on all mature T lymphocytes, on most thymocytes and on many T cell leukemias and lymphomas. It reacts with a subpopulation of activated B cells. CD5/Lyt1 antigen is a monomeric type I transmembrane glycoprotein expressed on thymocytes, T lymphocytes, and a subset of B lymphocytes, but not on natural killer (NK) cells. It has been identified as the major ligand of the B cell antigen CD72. The frequency of CD5+ B cells exhibits strain dependent variation, and the phenotypic, anatomical, functional, developmental, and pathological characteristics of the CD5+ B cells suggest that they may represent a distinct lineage, known as B1 cells. Binding of CD5 on the T cell surface can augment alloantigen or mitogen induced lymphocyte proliferation and induces increased cytosolic free calcium, IL2 secretion, and IL2R expression. It has been proposed that CD5 negatively regulates signal transduction

mediated by the T cell and B cell receptors.

Host / Isotype: Mouse / IgG1

Clone: f43

**Format:** State: Liquid purified Ig fraction.

Buffer System: PBS containing 0.09% Sodium Azide as preservative and a stabilizing

agent.

**Label:** PE – R-Phycoerythrin

**Applications:** Flow Cytometry:  $\langle \ \ | = 0.2 \, \mu \text{g} / 10e6 \, \text{cells.}$  (Ref.1-2)

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

**Specificity:** Specific to Feline CD5. (Mr. 67kDa)

This antibody is useful as a pan T Cell Marker. (Ref.1)

**Species:** Feline (Cat). Other species not tested.

**Storage:** Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Ackley, C.D., and M.D. Cooper. 1992. Am. J. Vet. Res. 53:466-471.

2. Dean, G.A., S.L. Quackenbush, C.D. Ackley, M.D. Cooper, and E.A. Hoover. 1991.

Vet. Immunol. Immunopathol 28:327-335.



**Pictures:** 

Immunofluorescent Staining: Peripheral blood mononuclear cells from a healthy domestic cat were double-stained with Mouse anti-Feline CD4-FITC (Cat.AM08113FC-N) and Mouse anti-Feline CD5-PE. Small lymphocytes were then gated and analyzed by two-color flow cytometry on a FACScan(TM) flow cytometry (BDIS, San Jose, CA). Amount Used:  $0.2 \mu g/10e6$  cells.

