

Monoclonal Antibody to CD5 - Purified

Alternate names:	LEU-1, LEU1, Ly-1, Lymphocyte antigen T1/Leu-1, Lyt-1, T-cell surface glycoprotein CD5
Catalog No.:	SM410P
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	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:	Rat / IgG2a
Recommended Isotype Controls:	SM15P, SM15PX
Clone:	YKIX322.3
Immunogen:	Concanavilin A activated canine peripheral blood cells. Spleen cells from an immunised DA rat were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.
Format:	State: Liquid purified IgG Purification: Affinity chromatography on Protein G Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide
Applications:	Immunoprecipitation. Immunohistochemistry on frozen sections. Flow Cytometry: 1/50 - 1/100; Use 10µl of the suggested working dilution to label 10e6 cells in 100µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises a 67kD cell surface glycoprotein expressed on the surface of T cells. Clustered as canine CD5 in the First Canine Leucocyte Antigen Workshop. Species: Dog. Other species not tested.

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.
Shelf life: one year from despatch.

General Readings: 1. Hewicker-Trautwein M, Carter SD, Bennett D, Kelly DF. Immunocytochemical demonstration of lymphocyte subsets and MHC class II antigen expression in synovial membranes from dogs with rheumatoid arthritis and degenerative joint disease. Vet Immunol Immunopathol. 1999 Mar 1;67(4):341-57. PubMed PMID: 10206202.