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CD4 Antibody [GK1.5]

CATALOG NUMBER: 76-336

Specifications

SPECIES REACTIVITY:	Mouse
TESTED APPLICATIONS:	FACS, Func, IHC, IP
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
SPECIFICITY:	The GK1.5 monoclonal antibody specifically binds with the mouse CD4 molecule, also known as L3T4, a 55 kDa differentiation antigen which binds to the MHC class II.
HOST SPECIES:	Rat

Properties

PURIFICATION:	The monoclonal antibody was purified utilizing affinity chromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/µg of the protein.
PHYSICAL STATE:	liquid
BUFFER:	Phosphate-buffered aqueous solution, ph7.2.
CONCENTRATION:	2 mg/mL
STORAGE CONDITIONS:	The product should be stored undiluted at 4˚C . Do not freeze.
CLONALITY:	Monoclonal
ISOTYPE:	Rat IgG2b, kappa
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	L3T4, Ly-4, Cd4
OFFICIAL SYMBOL:	Cd4
GENE ID:	12504

Background

BACKGROUND:	The GK1.5 monoclonal antibody specifically binds with the mouse CD4 molecule, also known as L3T4, a 55 kDa differentiation antigen which binds to the MHC class II. CD4 is expressed on most thymocytes, a subpopulation of mature T lymphocytes, dendritic cells, pluripotent hematopoietic stem cells, B cell precursors, and lymphoid precursors inside the thymus. It is also expressed on the mouse egg cell membrane, enhancing adhesion to MHC class II bearing sperm. By interaction with MHC class II on the surface of APC, CD4 initiates the development of T lymphocytes and helps the optimum functioning of mature T lymphocytes. The binding of the GK1.5 antibody blocks the binding of the Anti-Mouse CD4 RM4-5 antibody.
REFERENCES:	1) Dialynas, D. P., Quan, Z. S., Wall, K. A., Pierres, A., Quintans, J., Loken, M. R., ... Fitch, F. W. (1983). Characterization of the murine T cell surface molecule, designated L3T4, identified by monoclonal antibody GK1. 5: similarity of L3T4 to the human Leu-3/T4 molecule.The Journal of Immunology,131(5), 2445-2451.
	2) Bosselut, R., Zhang, W., Ashe, J. M., Kopacz, J. L., Samelson, L. E., Singer, A. (1999). Association of the adaptor molecule LAT with CD4 and CD8 coreceptors identifies a new coreceptor function in T cell receptor signal transduction.The Journal of experimental medicine,190(10), 1517-1526.
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