



1P-748-C100

Monoclonal Antibody to CD5 (mouse) Phycoerythrin (PE) conjugated (0.1 mg)

Clone:	53-7.3
Isotype:	Rat IgG2a
Specificity:	The rat monoclonal antibody 53-7.3 recognizes CD5, a 67kDa single-chain transmembrane glycoprotein expressed on mature T lymphocytes, most of thymocytes and B-1 lymphocytes.
Regulatory Status:	RUO
Immunogen:	mouse thymus or spleen cells
Species Reactivity:	Mouse
Preparation:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Concentration:	0.5 mg/ml
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD5 (T1) is a single-chain transmembrane glycoprotein 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. 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. 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.
References:	*Wang JY, Lee J, Yan M, Rho JH, Roehrl MH: Dermatan sulfate interacts with dead cells and regulates CD5(+) B-cell fate: implications for a key role in autoimmunity. <i>Am J Pathol.</i> 2011 May;178(5):2168-76. *Jeong YI, Hong SH, Cho SH, Lee WJ, Lee SE: Induction of IL-10-producing CD1dhighCD5+ regulatory B cells following Babesia microti-infection. <i>PLoS One.</i> 2012;7(10):e46553. doi: 10.1371/journal.pone.0046553. *Sestero CM, McGuire DJ, De Sarno P, Brantley EC, Soldevila G, Axtell RC, Raman C: CD5-dependent CK2 activation pathway regulates threshold for T cell anergy. <i>J Immunol.</i> 2012 Sep 15;189(6):2918-30

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

For laboratory research only, not for drug, diagnostic or other use.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz