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Biotinylated Monoclonal Antibody to Rat CD4

T Helper Cells

Monoclonal antibody Rib 5/2 is used for the identifcation of CD4 bearing cells, mainly T-helper / inducer lymphocytes. It can also be applied for *in vivo* blocking of CD4 mediated immunological reactions.

Product Number:	T-3123 (Lot 02PB0912)
Clone:	Rib5/2
Host species, isotype:	Mouse IgG2a
Quantity:	200µg
Format:	Purified, biotinylated, lyophilized
	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% Kathon as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C
	Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC); has been described to work in FACS.
	Approximate working dilution for IHC: Frozen sections: 0.5µg/ml (1:800) Paraffin sections: does not react on routinely processed paraffin sections
	Optimal dilutions should be determined by the end user.
	Suggested positive control: Rat spleen.
	Please see **www.bma.ch** for protocols and general information.
Immunogen:	Lymphoblasts.
Antigen, epitope:	Rib 5/2 detects a 53kDa glycoprotein located on the cell surface
Antigen distribution:	**Isolated cells:** T-lymphocytes and thymocytes, monocytes, macrophages.
	Tissue sections: Rib 5/2 stains T-cell areas in the spleen and lymph nodes. In the thymus Rib 5/2 detects cortical and medullary thymocytes. It recognises tissue macrophages and Th-cells according to the CD4 distribution.

Specificity: **Rat:** subpopulation of T-Cells.

Other species: not tested.

Comparison of CD4 and CD8 Monoclonal antibodies performed by flow cytometry

	% Positive Cells			
	CD4		**CD8**	
Isolated cells from:	Rib 5/2	W3/25	Rib 6/1	Ox-8
Lymph node	46	43	16	16
Spleen	31	30	13	13
Peripheral blood	48	49	25	26

Courtesy of Dr. Lehmann, University of Rostock, Germany.

Selected references

LEHMANN, M. et al.: Rejektionstherapie mit Anti-CD4 monoklonalen Antikoerpern nach allogener Transplantation bei der Ratte. Fruehjahrstagung fuer Immunologie, Berlin (1991).

KATZKE, G. et al.: Der Effekt einer temporaeren Anti-CD4 Therapie vor und nach allogener Inseltransplantation in Streptozotocin- diabetischen oder spontan-diabetischen Ratten. Fruehjahrstagung fur Immunologie, Berlin (1991).

LEHMANN, M. et al.: A novel high-efficient anti-CD4 monoclonal antibody induces long-term survival of rat skin allografts. Transplantation: 54(6), 959-962 (1992).

LEHMANN, M. et al.: Characterization of the Anti-CD4-Induced permanent Acceptace of Rat Renal Allografts. Transplantation Proceedings: 25(5), 2859-2860 (1993).

SIEGLING, A. et al.: A nondepleting Anti-Rat CD4 Monoclonal Antibody that supresses T Helper 1-like but not T Helper 2-like intragraft lymphokine secretion induces long-term survival of Renal Allografts. Transplantation: 57(3), 464-467 (1994).

For *in vitro* research only. This product contains Kathon as a preservative.