OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

AM26060BT-N Monoclonal Antibody to CD4 - Biotin

Alternate names: T-cell surface antigen T4/Leu-3, T-cell surface glycoprotein CD4

Quantity: 0.2 mg

Uniprot ID: P05540

NCBI: NP_036837

GeneID: 24932

Host / Isotype: Mouse / IgG2a

Clone: Rib5/2

Immunogen: Lymphoblasts

Format:
State: Lyophilized purified Ig fraction
Buffer System: Stock solution contains 0.4 mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5 mg/ml BSA as a stabilizer and 0.01% Kathon as a preservative.
Label: Biotin
Reconstitution: Restore by adding 0.5 ml distilled water.

Applications:
Immunohistochemistry on frozen sections: 0.5 µg/ml (1:800).
Does not react on routinely processed paraffin sections.
Has been described to work in FACS.
Suggested positive control: Rat spleen.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:
The antibody detects a 53kDa glycoprotein located on the cell surface. It 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.
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.

Species Reactivity: **Tested:** Rat.

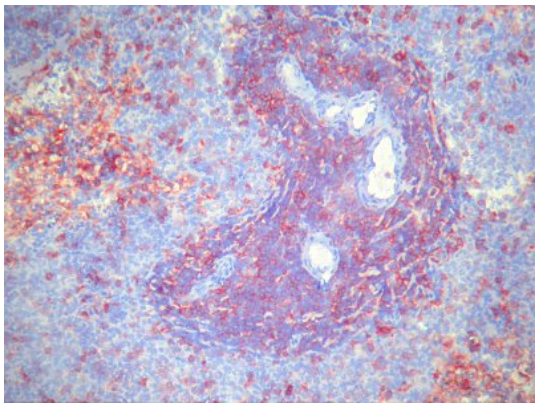
Storage:
Store lyophilized at 2-8°C for 6 months or at -20°C long term.
After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:
1. LEHMANN, M. et al.: Rejektionstherapie mit Anti-CD4 monoklonalen Antikoerpern nach allogener Transplantation bei der Ratte. Fruehjahrstagung fuer Immunologie, Berlin (1991).
2. 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).

3. Lehmann M, Sternkopf F, Metz F, Brock J, Döcke WD, Plantikow A, et al. Induction of long-term survival of rat skin allografts by a novel, highly efficient anti-CD4 monoclonal antibody. Transplantation. 1992 Dec;54(6):959-62. PubMed PMID: 1281565.
4. Lehmann M, Kuttler B, Siegling A, Gordalla A, Riedel H, Lacha J, et al. Characterization of the anti-CD4-induced permanent acceptance of rat renal allografts. Transplant Proc. 1993 Oct;25(5):2859-60. PubMed PMID: 8212264.
5. Siegling A, Lehmann M, Riedel H, Platzer C, Brock J, Emmrich F, et al. A nondepleting anti-rat CD4 monoclonal antibody that suppresses T helper 1-like but not T helper 2-like intragraft lymphokine secretion induces long-term survival of renal allografts. Transplantation. 1994 Feb;57(3):464-7. PubMed PMID: 8108886.

Pictures:

Immunohistochemistry on frozen sections: Staining with AM26060BT-N on rat spleen



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

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