

Monoclonal Antibody to CD4 (Domain 1) - FITC

Alternate names:	T-cell surface antigen T4/Leu-3, T-cell surface glycoprotein CD4
Catalog No.:	SM255F
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	CD4 is a single chain transmembraneous glycoprotein (59 kDa) which belongs to the immunoglobulin superfamily. CD4 is present on a subset of T lymphocytes ("helper/inducer" T cells) and is also expressed at a lower level on monocytes, tissue macrophages and granulocytes. The antigen is involved in binding to MHC class II molecules. The intracellular domain of the antigen is associated with p56lck protein tyrosine kinase.
Uniprot ID:	P05540
NCBI:	10116
Host / Isotype:	Mouse / IgG1
Clone:	W3/25
Immunogen:	Rat thymocyte membrane preparation.
Format:	State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein G. Buffer System: PBS, pH 7.4 with 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow cytometry: Use 10 µl of neat-1/10 diluted antibody to label 10e6 cells in 100 µl. Immunohistochemistry on Frozen and Paraffin Embedded Sections. This clone has been described reacting with paraffin-embedded material following PLP fixation (periodate-lysine-paraformaldehyde) (see Ref. 3). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises the rat CD4 cell surface glycoprotein, a 55 kD molecule expressed by helper T lymphocytes and weakly by monocytes. This antibody inhibits proliferation and IL-2 production in the MLR reaction. Species: Rat. Other species not tested.
Storage:	Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
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- General References:**
1. Williams, A.F. et al. (1977). Analysis of cell surfaces by xenogeneic myeloma-hybrid antibodies: differentiation antigens of rat lymphocytes. *Cell*. 12: 663-673.
 2. Barclay, A.N. (1981). The localization of populations defined by monoclonal antibodies in rat lymphoid tissues. *Immunology*. 42: 593-600.
 3. Whiteland, J.L. et al. (1995). Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. *J. Histochem. Cytochem.* 43(3): 313-320.
 4. Pelegri, C. et al. (1995). Immunohistochemical changes in synovial tissue during the course of adjuvant arthritis. *J. Rheumatol.* 22:124-132.
 5. Hofmann, N. et al. (2002). Increased expression of ICAM-1, VCAM-1, MCP-1, and MIP-1alpha by spinal perivascular macrophages during experimental allergic encephalomyelitis in rats. *BMC Immunol.* 3:11

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