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SM005LE Monoclonal Antibody to CD4 - Low Endotoxin

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

Quantity: 0.5 mg
Concentration: 1.0 mg/ml

Background: CD4, a single chain transmembrane glycoprotein, is found on a T cell subset

(helper/inducer) representing 45 % of peripheral blood lymphocytes. It is also present on 80 % of thymocytes and at a lower level on monocytes. It is involved in recognition of antigen presented along with MHC class II by APCs. It serves as receptor for HIV.

Uniprot ID: P06332

NCBI: NP 038516.1

GenelD: <u>12504</u>

Host / Isotype: Rat / IgG2b Clone: YTS191.1

Format: State: Liquid purified IgG fraction.

Purification: Affinity chromatography on Protein G **Buffer System:** PBS, pH 7.4 without preservatives.

Applications: Flow Cytometry: Use 10μl of 1/100-1/200 diluted antibody to label 10e6 cells in 100 μl.

Immunohistochemistry on Frozen Sections.

Functional asssays.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody recognises the CD4 cell surface antigen, expressed by a subset of T

lymphocytes.

This clone exhibits depleting activity when used in vivo.

Species: Mouse.

Other species not tested.

Add. Information: Endotoxin Level: less than 0.01 EU/µg

Storage: Store the antibody at -20°C only.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Cobbold SP, Martin G, Waldmann H. The induction of skin graft tolerance in major

histocompatibility complex-mismatched or primed recipients: primed T cells can be tolerized in the periphery with anti-CD4 and anti-CD8 antibodies. Eur J Immunol. 1990

Dec;20(12):2747-55. PubMed PMID: 1980112.

2. Bemelman F, Honey K, Adams E, Cobbold S, Waldmann H. Bone marrow

transplantation induces either clonal deletion or infectious tolerance depending on

the dose. J Immunol. 1998 Mar 15;160(6):2645-8. PubMed PMID: 9510162.

3. Higgins LM, McDonald SA, Whittle N, Crockett N, Shields JG, MacDonald TT.

Regulation of T cell activation in vitro and in vivo by targeting the OX40-OX40 ligand interaction: amelioration of ongoing inflammatory bowel disease with an OX40-IgG



fusion protein, but not with an OX40 ligand-IgG fusion protein. J Immunol. 1999 Jan 1;162(1):486-93. PubMed PMID: 9886424.

Pictures:

Staining of mouse spleen with RAT ANTI MOUSE CD4: LOW ENDOTOXIN

