

Product datasheet for **SM298B**

CD6 Mouse Monoclonal Antibody [Clone ID: OX-52]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OX-52
Applications:	FC, IHC
Recommended Dilution:	Flow Cytometry.
Reactivity:	Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	PVG-RT1c thoracic duct lymphocytes and spleen cells. Donor: BALB/c spleen. Fusion Partner: NSO/U.

Specificity: This monoclonal antibody immunoprecipitates a two chain structure (95, 120 kDa) largely restricted to T lymphocytes and thymocytes. Applications therefore include the identification of T lymphocyte lineage cells in suspension and tissue. This antibody has previously been used to stain T cell areas of the spleen, lymph nodes and Peyer's patch (1). In the thymus, this antibody labels all thymocytes, however medullary cells are more strongly positive than cortical cells (1). This Antibody does not label such non-lymphoid tissues such as brain, kidney, liver and skin (1).
This antibody stains approximately 1.0% of bone marrow cells, and 56% thoracic duct lymphocytes. Weak staining occurs with 50% dendritic cells from thoracic duct of mesenteric lymphadenectomized rats. The antigen recognized by this antibody is not expressed on granulocytes or macrophages. The function of the antigen recognized by this antibody has not, as yet, been associated with any particular function of T cells. CL052B does not inhibit the allogeneic mixed leukocyte response, nor does it inhibit T cytotoxic effector cell function.

Formulation: PBS, 0.02% NaN₃ and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml
Label: Biotin
State: Liquid purified IgG

Concentration: lot specific

Purification: Protein G Chromatography



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Conjugation:	Biotin
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	Cd6 molecule
Database Link:	Entrez Gene 25752 Rat Q812A4
Background:	CD6 is a type I membrane protein expressed by thymocytes, mature T cells, a subset of B cells known as B1 cells, and some cells in the brain. CD6 is a member of the scavenger receptor cysteine rich (SRCR) family of proteins, which includes the leukocyte antigen CD5. The extracellular domain of CD6 is composed of three SRCR domains and has the same domain organization as CD5. The ligand for CD6 is CD166 also known as activated leukocyte cell adhesion molecule. Through its interaction with CD166 in the thymus, CD6 may have a role in T cell development.
Synonyms:	T12, TP120

Note: Protocol: **FLOW CYTOMETRY ANALYSIS:**

Method:

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Lympholyte®-Rat cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2×10^7 cells/ml in media A. Add 50 μ l of this suspension to each tube (each tube will then contain 1×10^6 cells, representing 1 test).
4. To each tube, add 0.2-0.1 μ g* of this Ab per 10^6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
7. Wash 2 times at 4°C.
8. Add 100 μ l of secondary antibody (Streptavidin-FITC) at a 1:500 dilution.
9. Incubate tubes at 4°C for 30 - 60 minutes (It is recommended that tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C.
11. Resuspend the cell pellet in 50 μ l ice cold media B.
12. Transfer to suitable tubes for flow cytometric analysis containing 15 μ l of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

Media:

- A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 μ l of 2M sodium azide in 100 mls).
- B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 μ l of 2M sodium azide in 100 mls).

Results - Tissue Distribution:

Rat Strain: Wistar

Cell Concentration: 1×10^6 cells per tests

Antibody Concentration Used: 0.1 μ g/ 10^6 cells

Isotypic Control: Biotin Mouse IgG2a

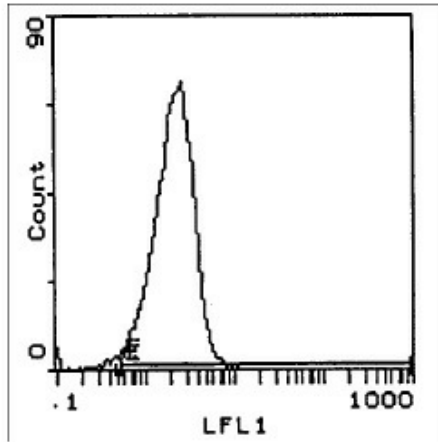
Cell Source Percentage of cells stained above control:

Thymus: 97.2%

Spleen: 34.4%

Lymph Node: 77.7%

Product images:



Cell Source: Thymus - Percentage of cells stained above control: 97.2%