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Product datasheet for CL039B

Thy1 (Thy1.2) Mouse Monoclonal Antibody [Clone ID: 5a-8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	5a-8
Applications:	FC, IHC
Recommended Dilution:	Flow Cytometry (protocol see below). Appropriate control samples should always be included in any labelling studies.
Reactivity:	Mouse
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	CBA/J Donor: AKR/J Spleen
Specificity:	This antibody detects CD90 (Thy 1.2). It reacts with all T lymphocytes from mouse strains expressing the Thy 1.2 phenotype (i.e. C57BL/6, C3H/He, DBA/2, CBA/J, BALB/c), but does not react with lymphocytes expressing the Thy 1.1 phenotype (i.e. AKR/J, B6.PL (74 NS).
Formulation:	PBS containing 0.02% Sodium Azide and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. Label: Biotin State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Protein G Chromatography.
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:	thymus cell antigen 1, theta
Database Link:	Entrez Gene 21838 Mouse P01831

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Background: CD90 / Thy1 antigen is a GPI linked glycoprotein member of the Immunoglobulin superfamily. It is expressed on murine T cells, thymocytes, neural cells, cells of granulocytic lineage, early hematopoietic progenitors, fibroblasts, neurons and Kupffer's cells. Thy1 may play a role in cell to cell or cell to ligand interactions during synaptogenesis and other events in the brain. It is found in most mouse strains except AKR/J, A, Thy1.1 and B6.PL (74NS) expressing Thy1.1.

Synonyms: Thy-1, THY1, CDw90

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

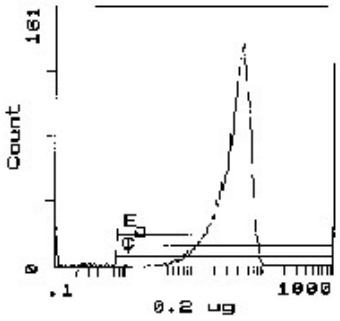
Method:

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 10e6 cells, representing 1 test).
4. To each tube, add 0.2-0.5 µg of this antibody per 10e6 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 µl 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 µl ice cold media B.
12. Transfer to suitable tubes for flow cytometric analysis containing 15 µl 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 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).

Results:
Tissue Distribution by Flow Cytometry Analysis:
Mouse Strain: CBA/J
Cell Concentration : 1x10e6 cells per tests
Antibody Concentration Used: 0.2 µg/10e6 cells
Isotypic Control: Biotin Mouse IgG2b,k
Cell Source: Percentage of cells stained above control:
Thymus: 97.8%
Spleen: 35.4%

Product images:



LFL 1
Cell Source: Thymus
Percentage of cells stained above control: 97.8 %