

Monoclonal Antibody to CD72 (CD72.1 alloantigen) - PE

Alternate names:	B-Cell marker, B-cell differentiation antigen CD72, Ly-32, Ly32, Lyb-2, Lymphocyte antigen 32
Catalog No.:	CL033R
Quantity:	50 µg
Concentration:	0.1 mg/ml
Background:	CD72 antigen is a member of the type II integral membrane glycoproteins which includes other related cell surface molecules such as the asialoglycoprotein receptors, CD23 and the Kupffer cell receptor. The function of CD72 is unknown but the exposure of B cells to CD72 antibodies activates a variety of signaling pathways and can induce MHC class II expression and B cell proliferation. CD72 antigen is expressed on all cells of B cell lineage with the exception of plasma cells and weakly on human tissue macrophages.
Uniprot ID:	P21855
NCBI:	XP_003086403.1
GeneID:	100504743
Host / Isotype:	Mouse / IgG2a
Clone:	CT-72.1
Format:	State: Liquid purified Ig Buffer System: PBS, 0.09% NaN ₃ and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml Label: PE
Applications:	Flow cytometry. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This monoclonal antibody reacts with the CD72 alloantigen CD72.1, a B-cell surface protein that is encoded by the Cd72a allele. CD72.1 is expressed on cells of the B cell lineage, except plasma cells ¹ . Mouse strains expressing CD72.1 include C57L/-, C58/-, DBA/1, DBA/2, and SWR/J. Species: Mouse. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This antibody is photosensitive and should be protected from light. Shelf life: one year from despatch.
General References:	1. Ying, H., J. I. Healy, C.C. Goodnow, and J.R. Parnes. 1998. Regulation of mouse CD72 gene expression during B lymphocyte development. J Immunol. 161: 4760-4767

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
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

2. Robinson, W.H., Tutt Landolfi, M.M., Schafer, H. and Parnes, J.R. 1993 Biochemical identity of the mouse ly-19.2 and ly-32.2 alloantigens with the B cell differentiation antigen Lyb-2/CD72. J. Immunol. 151:4764-4772.
3. Luo, W., de Velde, H.V., Hoegen, I.V., Parnes, J.R. and Thielemans, K. 1992 Ly-1 (CD5), a membrane glycoprotein of mouse T lymphocytes and a subset of B cells, is a natural ligand of the B cell surface protein Lyb-2 (CD72). J. Immunol. 148:1630-1634.

Protocols:**FLOW CYTOMETRY ANALYSIS:****Method:**

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Lympholyte®-M 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 $\sim 0.25 \mu\text{g}^*$ 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. (It is recommended that the tubes are protected from light, since most fluorochromes are light sensitive.)
7. Wash 2 times at 4°C.
8. Resuspend the cell pellet in 50 μ l ice cold media B.
9. 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).

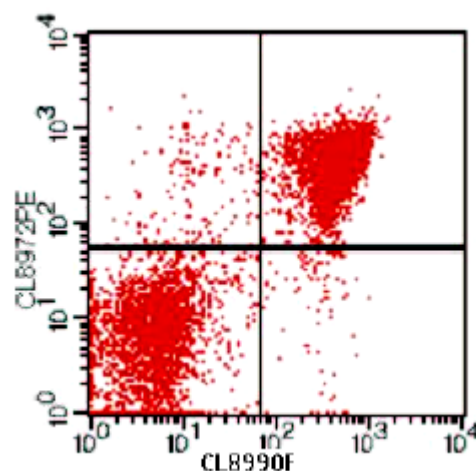
Results - Tissue Distribution:

Cell Concentration: 1×10^6 cells per test

Antibody Concentration Used: 0.25 $\mu\text{g}/10^6$ cells

Isotypic Control: PE Mouse IgG2a

Strain Tested: DBA mouse

Pictures:

Flow Cytometry - Cell Source: Mouse Spleen Lymphocytes - Percentage of cells stained above control: 63.3 %

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
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com