

Monoclonal Antibody to CD5 - PE

Alternate names:	CD5, LEU1, Lymphocyte antigen T1/Leu-1, T-cell surface glycoprotein CD5
Catalog No.:	AM08024RP-S
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	CD5/Lyt-1 antigen is a monomeric type I transmembrane glycoprotein expressed on thymocytes, T lymphocytes, and a subset of B lymphocytes, but not on natural killer (NK) cells. (Ref.1-3) It has been identified as the major ligand of the B-cell antigen CD72. (Ref.4,5) The frequency of CD5+ B cells exhibits strain-dependent variation, and the phenotypic, anatomical, functional, developmental, and pathological characteristics of the CD5+ B cells suggest that they may represent a distinct lineage, known as B-1 cells (reviewed in Ref.6). Binding of CD5 on the T cell surface can augment alloantigen- or mitogen-induced lymphocyte proliferation and induces increased cytosolic free calcium, IL-2 secretion, and IL-2R expression. (Ref.7-12) It has been proposed that CD5 negatively regulates signal transduction mediated by the T-cell and B-cell receptors. (Ref.13,14)
Uniprot ID:	P13379
NCBI:	NP_031676.3
GeneID:	12507
Host / Isotype:	Rat / IgG2a
Clone:	4H8E6
Format:	State: Liquid purified Ig fraction. Buffer System: PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent. Label: PE – R-Phycoerythrin
Applications:	Flow Cytometry: Identification and enumeration of CD5+ cells (\leq / = 0.2 μ g/10e6 cells). (Ref.15) Immunoprecipitation. (Ref.15) Immunohistochemistry on Frozen Sections. (Ref.15) T Cell Activation. (Ref.15) Western blotting. (Ref.15) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody is specific to CD5/Lyt-1 (Mr. 67 kDa) Species: Mouse. Other species not tested.

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

Storage:

Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Ledbetter, J. A. and L. A. Herzenberg. 1979. Immunol. Rev. 47:63.
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3. Ledbetter, J. A., R. V. Rouse, H. S. Micklem, and L. A. Herzenberg. 1980. J. Exp. Med. 152:280.
4. Van de Veld, H., I. von Hoegen, W. Luo, J. R. Parnes, and K. Thielemans. 1991. Nature 351:662.
5. Luo, W., H. Van de Velde, I. von Hoegen, J. R. Parnes, and K. Thielemans. 1992. J. Immunol. 148:1630.
6. Kantor, A. B. and L. A. Herzenberg. 1993. Ann. Rev. Immunol. 11:501.
7. Holland, N. 1982. Immunol. Rev. 68:43.
8. Stanton, T., T. L. Stevens, J. A. Ledbetter, and D. Wofsy. 1986. J. Immunol. 136:1734.
9. Verwilghen, J. R., P. Vandesande, and J. L. Ceuppens. 1996. Cell Immunol. 131:109.
10. Logdberg, L. and E. M. Shevach. 1996. Eur. J. Immunol. 15:1007.
11. June, C. H., P. R. Rabinovitch, and J. A. Ledbetter. 1987. J. Immunol. 138:2782.
12. Hollander, N., E. Pillemer, and I. L. Weissman. 1981. Proc. Natl. Acad. Sci. U. S. A. 78:1148.
13. Tarakhovsky, A., S.B. Kanner, J. Hombach, J.A. ledbetter, W. Muller, N. Killeen, and K. Rajewsky. 1995. Science 269:535.
14. Bikah, G., J. Carey, J.R. Cialella, A. Tarakhovsky, and S. Bobdada. 1996. Science 274:1906.
15. Parkhouse, R.M.E. 1996. Personal communication.

Pictures:

Immunofluorescent Staining: Cells from BALB/c spleen were double-stained with Rat anti-Mouse CD5-R-PE and rat anti-mouse CD19-FITC (Clone 6D5), following which small lymphocytes were gated and analyzed using a FACScan(TM) flow cytometer (BDIS, San Jose, CA). Amount used: < / = 0.2 µg/10e6 cells.

