

## Monoclonal Antibody to CD45 / LCA - PE

<b>Alternate names:</b>	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
<b>Catalog No.:</b>	AM08044RP-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.1 mg/ml
<b>Background:</b>	CD45 is a family of single chain transmembrane glycoproteins consisting of at least four isoforms (220, 205, 190, 180 kDa) which share a common large intracellular domain. Their extracellular domains are heavily glycosylated. The different isoforms are produced by alternative messenger RNA splicing of three exons of a single gene on chromosome 1. CD45 is expressed on cells of the human hematopoietic lineage (including hematopoietic stem cells) with the exception of mature red cells. It is not detected on differentiated cells of other tissues. It is likely that CD45 plays an important role in signal transduction, inhibition or upregulation of various immunological functions. Antibodies recognising a common epitope on all of the isoforms are termed CD45 while those recognising only individual isoforms are termed CD45RA or CD45RO etc.
<b>Uniprot ID:</b>	<a href="#">P06800</a>
<b>NCBI:</b>	<a href="#">10090</a>
<b>Host / Isotype:</b>	Rat / IgG2b
<b>Clone:</b>	I3/2.3
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Buffer System:</b> PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent <b>Label:</b> PE – R-Phycoerythrin
<b>Applications:</b>	<b>Flow Cytometry:</b> $\leq 0.2 \mu\text{g}/10^6$ cells. (Ref.4,5) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody recognizes a framework epitope present on all CD45 isoforms. (Ref.3-6) <b>Species:</b> Mouse. Other species not tested.
<b>Storage:</b>	Store the antibody undiluted at 2-8°C. <b>DO NOT FREEZE!</b> This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Berggreen E, Haug SR, Mkonyi LE, Bletsa A. Characterization of the dental lymphatic system and identification of cells immunopositive to specific lymphatic markers. Eur J Oral

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)



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2. Anand RJ, Dai S, Rippel C, Leaphart C, Qureshi F, Gripar SC, et al. Activated macrophages inhibit enterocyte gap junctions via the release of nitric oxide. *Am J Physiol Gastrointest Liver Physiol.* 2008 Jan;294(1):G109-19. Epub 2007 Nov 1. PubMed PMID: 17975131.

3. Johnson, P, L. Greenbaum, K. Bottomley and I. S. Trowbridge. 1989. *J. Exp. Med.* 169:1179.

4. Haidl, I. D., D. H. W. Ng, S. Rothenberger, P. Johnson, and W. A. Jefferies. 1996. *Eur. J. Immunol.* 25:3370.

5. Trowbridge, I.S. 1978. *J. Exp. Med.* 148:313.

6. Trowbridge, I.S and M.L. Thomas. 1994. *Ann. Rev. Immunol.* 12:85

**Pictures:**

**Immunofluorescent Staining:** BALB/c spleen cells were double-stained with Rat anti-Mouse CD45-PE and Rat anti-Mouse CD4-FITC. Small lymphocytes were gated and analyzed on a FACScan(TM) flow cytometer (BDIS, San Jose,CA). Amount Used: 0.3 µg/10e6 cells.

