

## Monoclonal Antibody to CD45 / LCA (CD45RB) - PE

<b>Alternate names:</b>	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
<b>Catalog No.:</b>	AM08045RP-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.1 mg/ml
<b>Background:</b>	<p>CD45RB is an isoform of CD45 with exon 5 splicing (encodes B determinant). It is a 220 kD glycoprotein expressed on peripheral B cells, naïve T cells, thymocytes, weakly on macrophages, and dendritic cells. It plays a critical role in TCR and BCR signaling. As T cells become activated and progress from naïve to memory cells, CD45RB expression is downregulated. Additionally, functionally distinct CD4 T cell subsets, which secrete differing cytokine profiles, can be separated by CD45RB intensity. The primary ligands for CD45 are galectin-1, CD2, CD3, CD4 and Thy-1.</p> <p>Distribution: Peripheral B cells, naïve T cells, most thymocytes, low density on macrophages and dendritic cells.</p> <p>Function: Phosphatase, T cell development and activation Structure: Phosphatase receptor (CD45 gene exon 5), 220 kD</p>
<b>Uniprot ID:</b>	<a href="#">P06800</a>
<b>NCBI:</b>	<a href="#">10090</a>
<b>Host / Isotype:</b>	Rat / IgG2a
<b>Clone:</b>	C363.16A
<b>Immunogen:</b>	Cloned mouse Th2 cell lines. (Ref.1)
<b>Format:</b>	<p><b>State:</b> Liquid purified Ig fraction.</p> <p><b>Buffer System:</b> PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent.</p> <p><b>Label:</b> PE – R-Phycoerythrin</p>
<b>Applications:</b>	<p><b>Flow Cytometry.</b> &lt; / = 0.2 µg/10e6 cells. (Ref.1-3)</p> <p>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
<b>Specificity:</b>	<p>This antibody is specific to an exon B-dependent epitope of CD45 glycoprotein.</p> <p><b>Species:</b> Mouse.</p> <p>Other species not tested.</p>
<b>Storage:</b>	<p>Store the antibody undiluted at 2-8°C.</p> <p><b>DO NOT FREEZE!</b></p> <p>This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing.</p> <p>Shelf life: one year from despatch.</p>

**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)

- General Readings:**
1. Bottomly, K., M. Luqman, L. Greenbaum, S. Carding, J. West, T. Pasqualini, and D.B. Murphy. 1989. Eur. J. Immunol. 19:617.
  2. Hathcock, K.S., G. Laslo, H.B. Dickler, S.O. Sharrow, P. Johnson, I.S. Trowbridge, and R.J. Hodes. 1992. J. Immunol. 148:19.
  3. Johnson, P., L. Greenbaum, K. Bottomly, and I.S. Trowbridge. 1989. J. Exp. Med. 169:1179.
  4. Birkeland, M.L., et al. 1988. J. Mol. Cell. Immunol. 4:71.

**Pictures:** **Immunofluorescent Staining:** BALB/c spleen cells were double-stained with Rat anti-Mouse CD45RB-PE and Rat anti-Mouse CD8a-FITC. Small lymphocytes were gated and analyzed on a FACScan(TM) flow cytometer (BDIS, San Jose,CA). Amount Used: 0.1 µg/10e6 cells.

