

## Monoclonal Antibody to CD45 / LCA (CD45.1 alloantigen) - PE-Cy7

<b>Alternate names:</b>	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
<b>Catalog No.:</b>	AM08062RC7-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.1 mg/ml
<b>Background:</b>	<p>The CD45 antigen is an essential regulator of leukocyte activation and development, and is now known to be a protein tyrosine phosphatase, e.g. CD45 is able to dephosphorylate the Src family of protein kinases. (Ref.1,2)</p> <p>This activity is now known to be required for signal transduction induced by T and B cell antigen receptor engagement, cytokine signaling and Fc receptor stimulation. (Ref.1,2) The functional state of CD45 also has a pronounced effect on lymphocyte development. CD45 exists in multiple forms, such as the restricted variants (CD45R; see companion products AM08044, AM08045, AM08046) and as allelic forms CD45.1/Ly-5.1 and CD45.2/Ly-5.2. The former arises as a result of alternative splicing of different exons. The specificity of antibodies to CD45.1 and CD45.2 has been exploited in studies where resolution of donor and recipient cells is essential, such as in gene therapy or bone marrow transplantation. (Ref.3,4)</p> <p>The monoclonal antibody A20 is used as Marker for origin of donor and host cells. (Ref.3,4)</p>
<b>Uniprot ID:</b>	<a href="#">P06800</a>
<b>NCBI:</b>	<a href="#">10090</a>
<b>Host / Isotype:</b>	Mouse / IgG2a
<b>Clone:</b>	A20
<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-Cy7 – R-Phycoerythrin-Cyanine 7
<b>Applications:</b>	<b>Flow Cytometry:</b> < / = 0.2 µg/10e6 cells. (Ref.3,4) <b>Fluorescence Microscopy.</b> (Ref.3,4) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The monoclonal antibody A20 recognizes all mouse leukocytes expressing the CD45.1 allotype. <b>Species:</b> 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](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)

**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. Okumura, M. and M. L. Thomas. 1995. Current Opin. Immunol. 7:312-319.
2. Thomas. M. L. 1995. Seminars in Immunol. 7:279-288.
3. Mardiney, M and H. L. Malech. 1996. Blood 87:4049-4056.
4. Vallera, D. A., et al. 1994. Transplantation 57:249-256.

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