

## Monoclonal Antibody to CD45 / LCA - Purified

<b>Alternate names:</b>	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
<b>Catalog No.:</b>	SM032P
<b>Quantity:</b>	0.25 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.
<b>Uniprot ID:</b>	<a href="#">P06800</a>
<b>NCBI:</b>	<a href="#">10090</a>
<b>Host / Isotype:</b>	Rat / IgG2b
<b>Clone:</b>	YW 62.3
<b>Immunogen:</b>	Mouse spleen cells. Spleen cells from immunised DA rats were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction. <b>Purification:</b> Affinity Chromatography on Protein G <b>Buffer System:</b> PBS, pH 7.4 containing 0.09% Sodium Azide as preservative.
<b>Applications:</b>	Flow cytometry: Use 10 µl of 1/50-1/100 diluted antibody to label 10e6 cells in 100 µl. Immunoprecipitation. Immunohistochemistry on Frozen Sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody recognises the CD45 cell surface antigen, a 180-220kD glycoprotein expressed by all leucocytes. <b>Species:</b> Mouse. Other species not tested.

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

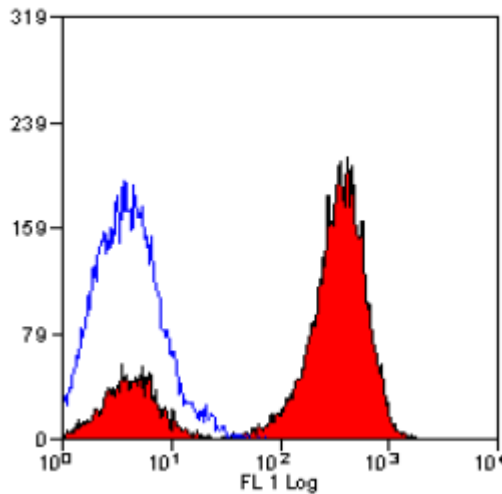
Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

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 for one month or (in aliquots) at -20°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General References:** 1. Watt, S.M. et al. (1987) Cell surface markers on haemopoietic precursors. Reagents for the isolation and analysis of progenitor cell subpopulations. *Mol. Cell. Probes* 1: 297-326.  
2. Bindon, C.I. et al. (1988) Importance of antigen specificity for complement-mediated lysis by monoclonal antibodies. *Eur. J. Immunol.* 18: 1507-1514.

**Pictures:**



Staining of mouse spleen cells with RAT ANTI MOUSE CD45 (Ly-5)

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