

Monoclonal Antibody to CD45 / LCA - PE

Alternate names:	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
Catalog No.:	SM274R
Quantity:	100 Tests
Background:	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 whilst those recognising only individual isoforms are termed CD45RA or CD45RO etc.
Uniprot ID:	P04157
NCBI:	NP_001103357.1
GeneID:	24699
Host / Isotype:	Mouse / IgG1
Clone:	OX-1
Immunogen:	Rat thymocyte membrane glycoproteins.
Format:	State: Lyophilized purified IgG fraction. Buffer System: PBS, pH 7.4, containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: PE – Phycoerythrin (RPE) Reconstitution: Restore with 1 ml distilled water.
Applications:	Flow Cytometry: Use 10 µl of neat antibody to label 10e6 cells in 100 µl. (This product is routinely tested in flow cytometry on rat splenocytes). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises CD45. OX-1 reacts with all forms of CD45 expressed by all haematopoietic cells, except erythrocytes. Species: Rat. 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 Prior to and following reconstitution at 2-8°C.

DO NOT FREEZE.

This product is photosensitive and should be protected from light.

Shelf life: One year from despatch.

Product Citation:

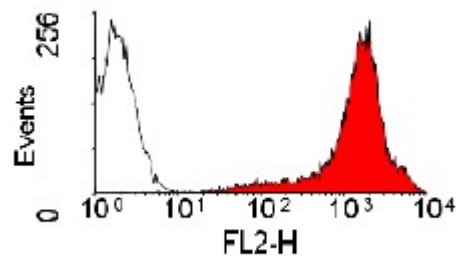
1. C. Eipel, R. Bordel, R. M. Nickels, M. D. Menger, and B. Vollmar: Impact of leukocytes and platelets in mediating hepatocyte apoptosis in a rat model of systemic endotoxemia; *Am J Physiol Gastrointest Liver Physiol*, May 2004; 286: G769 - G776.

General References:

1. Sunderland, C. A. et al. (1979) Purification with monoclonal antibody of a predominant leukocyte-common antigen and glycoprotein from rat thymocytes. *Eur. J. Immunol.* 9:155-159
2. Woollett, G. R. et al. (1985) Molecular and antigenic heterogeneity of the rat leukocyte-common antigen from thymocytes and T and B Lymphocytes. *Eur. J. Immunol.* 15:168-173
3. Martin, A. et al. (1995) Passive dual immunization against tumour necrosis factor-alpha (TNF-alpha) and IL-1 beta maximally ameliorates acute aminonucleoside nephrosis. *Clin. Exp. Immunol.* 99:283-288
4. Sato, K et al. (2001) Carbon monoxide generated by heme oxygenase-1 suppresses the rejection of mouse-to-rat cardiac transplants. *J. Immunol.* 166:4185-4194
5. Murakami, K. et al. (2000) Regulation of mast cell signalling through high-affinity IgE receptor by CD45 protein tyrosine phosphatase. *Int. Immunol.* 12(2):169-176

Pictures:

Staining of rat spleen cells with mouse anti rat CD45 - RPE



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