

Monoclonal Antibody to CD45 / LCA - Purified

Alternate names:	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
Catalog No.:	SM274P
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction.
Uniprot ID:	P04157
NCBI:	NP_001103357.1
GeneID:	24699
Host / Isotype:	Mouse / IgG1
Clone:	OX-1
Immunogen:	Rat thymocyte membrane glycoproteins
Format:	State: Liquid purified Ig fraction Purification: Protein G chromatography Buffer System: 0.09 % Sodium Azide
Applications:	Flow cytometry: use 10 µl of 1/100 diluted antibody to label 10e6 cells. Immunohistochemistry on frozen sections (3). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	SM274P recognises CD45, also known as the leucocyte common antigen (LCA). The leucocyte common antigen consists of a family of heavily glycosylated membrane glycoproteins of molecular weight 180 - 240 kDa. Antibodies recognizing a common epitope on all of these isoforms are termed CD45, whilst those recognising only individual isoforms are termed CD45RA, CD45RO etc. OX-1 reacts with all forms of CD45 expressed by all haematopoietic cells, except erythrocytes. This product is routinely tested by flow cytometry on rat splenocytes. Species: Rat. Other species not tested.
Storage:	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
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

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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 mousetorat cardiac transplants. *J. Immunol.* 166:4185-4194

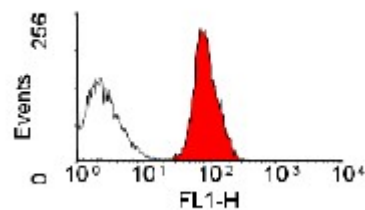
5. Murakami, K. et al. (2000) Regulation of mast cell signalling through high-affinity IgE receptor by CD45 protein tyrosine phosphatase. *Int. Immunol.* 12(2):169-176.

6. Standring, R. et al. (1978) The predominant heavily glycosylated glycoproteins at the surface of rat lymphoid cells are differentiation antigens. *Eur. J. Immunol.* 8 12):832-9.

7. Giezeman-Smits, K.M. et al. (1999) The regulatory role of CD45 on rat NK cells in target cell lysis. *J. Immunol.* 163(1):71-6.

Pictures:

Staining of rat peripheral blood lymphocytes with MOUSE ANTI RAT CD45 (SM274P).



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