

Monoclonal Antibody to CD45 / LCA (CD45RA) - Purified

Alternate names:	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
Catalog No.:	SM279P
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	CD45 is a complex molecule, and is comprised of different glycoproteins ranging from 180-240 kDa. Expression of CD45 is found on all hemopoietic cells. Detection of the different isoforms can distinguish between different cell forms i.e. naive T cells and memory T cells. CD45RA is an isoform of the CD45 complex and has restricted expression between different subtypes of lymphoid cells. The functional activity of each CD45 isotype also varies. Antibodies recognising a common epitope on all of these 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-33
Immunogen:	Purified rat spleen leucocyte common antigen. Spleen cells from immunised BALB/c mice were fused with cells of the NSO/U myeloma cell line.
Format:	State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein G. Buffer System: PBS, pH 7.2 containing 0.09% Sodium Azide as preservative.
Applications:	Flow Cytometry: Use 10 µl of 1/100 diluted antibody to label 1x10 ⁶ cells in 100 µl. Immunohistochemistry on Frozen and Paraffin Embedded Sections. This clone has been described reacting with paraffin-embedded material following PLP fixation (PeriodateLysine- Paraformaldehyde) (See Whiteland et al., Ref.4). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	SM279P is directed against a high molecular weight band of the leucocyte common antigen (LCA). OX-33 only labels B-cells among thoracic duct lymphocytes with little labelling in the bone marrow and none on thymocytes (see Ref. 2). 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 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. 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.
2. Barclay, A.N. et al. (1987) Lymphocyte specific heterogeneity in the rat leucocyte common antigen (T200) is due to differences in polypeptide sequences near the NH₂-terminus. *EMBO J.* 6: 1259-1264.
3. Barclay, A.N. et al. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. *Immunology.* 42: 593-600.
4. Whiteland, J.L. et al. (1995) Immunohistochemical detection of T-cell subsets and other leucocytes in Paraffin-embedded rat and mouse tissues with monoclonal antibodies. *J. Histochem. Cytochem.* 43: 313-320.

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