

Monoclonal Antibody to CD45 / LCA - FITC

Alternate names:	L-CA, Leukocyte common antigen, PTPRC, Receptor-type tyrosine-protein phosphatase C, T200
Catalog No.:	SM032FX
Quantity:	0.5 mg
Concentration:	0.5 mg/ml
Background:	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.
Uniprot ID:	P06800
NCBI:	10090
Host / Isotype:	Rat / IgG2b
Clone:	YW 62.3
Immunogen:	Mouse spleen cells. Spleen cells from immunised DA rat were fused with cells of the Y3/Ag1.2.3 myeloma cell line.
Format:	State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein G Buffer System: PBS containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow Cytometry: Use 10µl of 1/20-1/50 diluted antibody to label 10e6 cells in 100µl. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

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
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- Specificity:** This antibody recognises the CD45 cell surface antigen, a 180-220kD glycoprotein expressed by all leucocytes.
Species: Mouse.
Other species not tested.
- 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.
This product is photosensitive and should be protected from light.
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.

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