

## Product datasheet for **SM032R**

### CD45 / LCA Rat Monoclonal Antibody [Clone ID: YW 62.3]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	YW 62.3
Applications:	FC
Recommended Dilution:	Flow Cytometry: Use 10 µl of neat antibody to label 10e6 cells in 100 µl. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors.
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Mouse spleen cells. Spleen cells from an immunised DA rat were fused with cells of the rat Y3/Ag1.2.3 myeloma cell line.
Specificity:	This antibody recognises the CD45 cell surface antigen, a 180-220KD glycoprotein, expressed by all leucocytes.
Formulation:	PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: PE State: Lyophilized purified IgG fraction. Label: R. Phycoerythrin (RPE)
Reconstitution Method:	Restore with 1 ml distilled water.
Purification:	Affinity chromatography on Protein G.
Conjugation:	PE
Storage:	Store the antibody undiluted Prior to and after reconstitution at 2-8°C. <b>DO NOT FREEZE!</b> This product is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein tyrosine phosphatase, receptor type, C
Database Link:	<a href="#">Entrez Gene 19264 Mouse P06800</a>



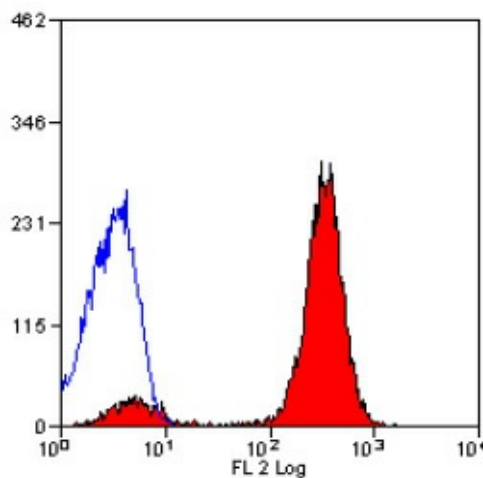
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**Background:**

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.

**Synonyms:**

PTPRC, Leukocyte common antigen, L-CA, T200

**Product images:**


Staining of mouse spleen cells with Rat Anti Mouse CD45-RPE.