

Product datasheet for **SM034F**

CD45 / LCA (CD45R) Rat Monoclonal Antibody [Clone ID: RA3-6B2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	RA3-6B2
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:	Feline, Human, Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Mouse pre-B tumour cells (RAW112).
Specificity:	This antibody reacts with CD45R a form of the CD45 antigen expressed by B cells and lytically active subsets of NK cells and non-MHC restricted CTLs. Clone RA3-6B2 Immunoprecipitates the high molecular weight form of CD45 (220kD).
Formulation:	PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. Label: FITC State: Liquid purified IgG fraction. Label: Fluorescein Isothiocyanate Isomer 1 Absorption emission: 490 nm / 525 nm
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	FITC
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.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein tyrosine phosphatase, receptor type, C
Database Link:	Entrez Gene 19264 Mouse P06800



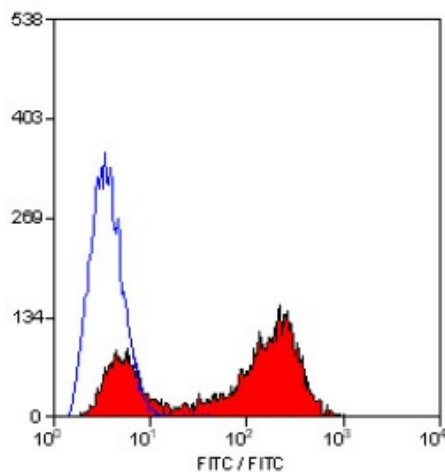
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Background:

CD45R is a member of the protein tyrosine phosphatase (PTP) family and a major cell surface glycoprotein. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. CD45R represents a restricted form of the CD45 family which primarily recognizes only cells of B lineage from proB cell through mature B lymphocytes and, prior to the availability of anti CD19 MAbs, was commonly used as a pan B cell marker. It also reacts with certain activated T cells, as well as non MHC restricted lytically active lymphokine activated killer (LAK) cells. CD45R contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains. It is specifically expressed in hematopoietic cells and has been shown to be an essential regulator of T and B cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. CD45R also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Four alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported.

Synonyms:

PTPRC, Leukocyte common antigen, L-CA, T200

Product images:

Staining of mouse spleen cells with Rat Anti Mouse CD45R-FITC.