

Product datasheet for **AM39051SU-N**

Ptprc (CD45R) Mouse Monoclonal Antibody [Clone ID: HIS24]

Product data:

Product Type:	Primary Antibodies
Clone Name:	HIS24
Applications:	IF, IHC
Recommended Dilution:	Flow cytometry. Immunofluorescence. Immunohistochemistry on frozen tissue sections.
Reactivity:	Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Single cell suspension of rat peyers patches
Specificity:	The antibody recognizes CD45R found on mature and precursor B lymphocytes. Weak reaction with marginal zone B cells and a small subset of T cells.
Formulation:	State: Supernatant State: Liquid cell culture supernatant containing 0.09% sodium azide
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C.
Gene Name:	protein tyrosine phosphatase, receptor type, C
Database Link:	Entrez Gene 24699 Rat P04157



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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