

Datasheet

CD45RB monoclonal antibody, clone PTPRC/1147

Catalog Number: MAB13025

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against full length recombinant human CD45RB.

Clone Name: PTPRC/1147

Immunogen: Recombinant protein corresponding to full length human CD45RB.

Host: Mouse

Theoretical MW (kDa): 180-220

Reactivity: Human

Applications: Flow Cyt, IF, IHC-P, WB-Ce
(See our web site product page for detailed applications information)

Protocols: See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Specificity: CD45R, also designated CD45 and PTPRC, has been identified as a transmembrane glycoprotein, broadly expressed among hematopoietic cells. Multiple isoforms of CD45R are distributed throughout the immune system according to cell type. These isoforms arise because of alternative splicing of exons 4, 5, and 6. The corresponding protein domains are characterized by the binding of monoclonal antibodies specific for CD45RA (exon 4), CD45RB (exon 5), CD45RC (exon 6) and CD45RO (exons 4 to 6 spliced out). The variation in these isoforms is localized to the extracellular domain of CD45R, while the intracellular domain is conserved. CD45RB is expressed on mature B-lymphocytes and the majority of lymphomas and leukemias of B-cell origin.

Form: Liquid

Purification: Protein A/G purification

Isotype: IgG1, kappa

Recommend Usage: Flow Cytometry (0.5-1 ug/million cells in 0.1 mL)

Immunofluorescence (0.5-1 ug/mL)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.5-1 ug/mL)

Western Blot (0.5-1 ug/mL)

The optimal working dilution should be determined by the end user.

Storage Buffer: In 10 mM PBS (0.05% BSA, 0.05% sodium azide).

Storage Instruction: Store at 4°C.

Entrez GeneID: 5788

Gene Symbol: PTPRC

Gene Alias: B220, CD45, CD45R, GP180, LCA, LY5, T200

Gene Summary: The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus belongs to receptor type PTP. This gene is specifically expressed in hematopoietic cells. This PTP 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. This PTP 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. [provided by RefSeq]