

Datasheet

PTPRC monoclonal antibody, clone C11

Catalog Number: MAB6955

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against native PTPRC.

Clone Name: C11

Immunogen: Native purified PTPRC from peripheral blood mononuclear cells.

Host: Mouse

Reactivity: Human

Applications: Flow Cyt, IHC-Fr, IP
(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

Form: Liquid

Isotype: IgG2a, kappa

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

Storage Buffer: In 50 mM sodium phosphate buffer, 100 mM potassium Chloride, 150 mM NaCl, pH 7.5 (0.5 mg/mL gentamicin sulfate)

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]

References:

1. The extracellular domain of CD45 controls association with the CD4-T cell receptor complex and the response to antigen-specific stimulation. Leitenberg D, Novak TJ, Farber D, Smith BR, Bottomly K. *J Exp Med.* 1996 Jan 1;183(1):249-59.
2. CD45: an emerging role as a protein tyrosine phosphatase required for lymphocyte activation and development. Trowbridge IS, Thomas ML. *Annu Rev Immunol.* 1994;12:85-116.
3. Isoform-specific associations of CD45 with accessory molecules in human T lymphocytes. Dianzani U, Redoglia V, Malavasi F, Bragardo M, Pileri A, Janeway CA Jr, Bottomly K. *Eur J Immunol.* 1992 Feb;22(2):365-71.