

CD45RA monoclonal antibody, clone 158.4D3

Catalog # MAB6953

Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against native CD45RA.
Immunogen	Native purified CD45RA from stimulated human leukocytes.
Host	Mouse
Reactivity	Human
Form	Liquid
Isotype	IgG2a
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.

Applications

- Immunohistochemistry
- Immunoprecipitation
- Flow Cytometry

Gene Info — PTPRC

Entrez GeneID	5788
Gene Name	PTPRC

Gene Alias	B220, CD45, CD45R, GP180, LCA, LY5, T200
Gene Description	protein tyrosine phosphatase, receptor type, C
Omim ID	126200 151460 609532
Gene Ontology	Hyperlink
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 extra cellular 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]
Other Designations	CD45 antigen T200 glycoprotein T200 leukocyte common antigen glycoprotein leukocyte-common antigen protein tyrosine phosphatase, receptor type, c polypeptide

Publication Reference

- [CD45: an emerging role as a protein tyrosine phosphatase required for lymphocyte activation and development.](#)

Trowbridge IS, Thomas ML.

Annual Review of Immunology 1994 Jan; 12:85.

- [Inhibitory effect of IL-4 on the sepharose-CD3-induced proliferation of the CD4CD45RO human T cell subset.](#)

Gaya A, Alsinet E, Martorell J, Places L, de la Calle O, Yague J, Vives J.

International Immunology 1990 Jan; 2(7):685.

Application: Flow Cyt, Func, Human, Human T cells

Pathway

- [Cell adhesion molecules \(CAMs\)](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Primary immunodeficiency](#)
- [T cell receptor signaling pathway](#)

Disease

- [Arthritis](#)
- [Ascariasis](#)
- [Autoimmune Diseases](#)
- [Cardiomyopathy](#)
- [Diabetes Mellitus](#)
- [Genetic Predisposition to Disease](#)
- [Graves Disease](#)
- [Hashimoto Disease](#)
- [Hepatitis](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Inflammatory Bowel Diseases](#)
- [Lupus Erythematosus](#)
- [Lymphopenia](#)
- [Multiple Sclerosis](#)
- [Paraparesis](#)
- [Scleroderma](#)
- [Severe combined immunodeficiency](#)
- [Thyroiditis](#)