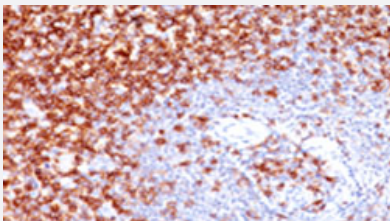


PTPRC monoclonal antibody, clone SPM125

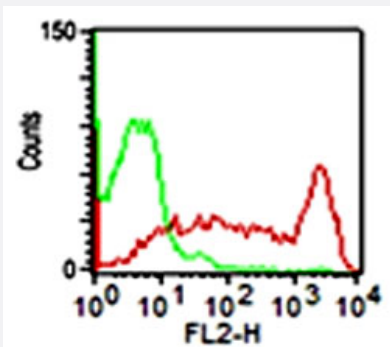
Catalog # MAB12049 Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human tonsil with PTPRC monoclonal antibody, clone SPM125 (Cat# MAB12049).



Flow Cytometry

Flow cytometric analysis of PBMC with PTPRC monoclonal antibody, clone SPM125 (Cat# MAB12049).

Specification

Product Description	Mouse monoclonal antibody raised against PTPRC.
Immunogen	Cultured human T-cells from an IL-2-dependent T-cell line (CA1).
Host	Mouse
Theoretical MW (kDa)	180-185
Reactivity	Human
Form	Liquid

Purification	Protein A/G purification
Isotype	IgG2a, kappa
Recommend Usage	Flow Cytometry (0.5-1 ug/10 ⁶ cells) Immunohistochemistry (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 PBS (0.05% BSA, 0.05% sodium azide).
Storage Instruction	Store at 4°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human tonsil with PTPRC monoclonal antibody, clone SPM125 (Cat# MAB12049).

- Flow Cytometry

Flow cytometric analysis of PBMC with PTPRC monoclonal antibody, clone SPM125 (Cat# MAB12049).

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 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]

Other Designations

CD45 antigen|T200 glycoprotein|T200 leukocyte common antigen|glycoprotein|leukocyte-common antigen|protein tyrosine phosphatase, receptor type, c polypeptide

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](#)