

PTPRC monoclonal antibody, clone BRA-55

Catalog # MAB5305

Size

Specification

Product Description	Mouse monoclonal antibody raised against native PTPRC.
Immunogen	Native purified PTPRC from REH6 cell line.
Host	Mouse
Reactivity	Human
Specificity	The monoclonal antibody LCA (CD45) is a useful marker to differentiate between lymphomas and carcinomas. Since this monoclonal gives a pronounced staining on formalin fixed paraffin embedded cells it is very useful in routine pathology. Reactive with 170-220 kD cell surface glycoprotein(s).
Form	Liquid
Isotype	IgG1
Recommend Usage	Immunohistochemistry (1:10-1:20) The optimal working dilution should be determined by the end user.
Storage Buffer	In ascites (0.09% sodium azide)
Storage Instruction	Store at 4°C.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

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

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

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](#)