

Recombinant Anti-PTPRC Antibody (V3S-0522-YC5376)

Cat. No.: V3S-0522-YC5376

Summary

Description	This product is a monoclonal antibody derived from Human (<i>Homo sapiens</i>), which can specifically recognize Protein tyrosine phosphatase, receptor type C. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation. Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (<1 EU/mg or 0.1 E U/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Human
Target Species	Human
Immunogen	Mixture of 5 human CD45RB peptides
Isotype	IgG2, κ
Isotype Control	C40662
Secondary Antibody	C32400; C75370; C10513; C51635; C45530; C47006; C61612

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 μ M filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	Store at 4°C within a week. For longer storage, aliquot and store at -20°C.

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

Applications

Application	ELISA; FC
Application Notes	The antibody is recommended for detection of PTPRC by ELISA, FC assays.

Target

Target	PTPRC
Alternative Name	LCA; LY5; B220; CD45; L-CA; T200; CD45R; GP180; PTPRC
Gene ID	5788
UniProt	P08575
Introduction	Protein tyrosine phosphatase, receptor type C belongs to the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. 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. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported.
Research Area	Immunology
Related Disease	Transplant rejection, Autoimmune diseases (Rheumatoid arthritis, Multiple sclerosis, Autoimmune diabetes)

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