

PTPRC/CD45RABC Protein, Human (HEK293, His)

Cat. No.:	HY-P77824
Synonyms:	L-CA; CD45; T200; PTPRC; B220; CD45R; GP180; LCA; LY5; EC 3.1.3.48
Species:	Human
Source:	HEK293
Accession:	P08575-3 (Q26-K577)
Gene ID:	5788
Molecular Weight:	118-150 kDa

PROPERTIES

Biological Activity	Immobilized Human CD45, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD45 Antibody, hFc Tag with the EC ₅₀ of 0.23µg/ml determined by ELISA.
Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background

Receptor-type tyrosine-protein phosphatase C (PTPRC) is a member of the protein tyrosine phosphatase (PTP) family, also known as CD45, is a transmembrane glycoprotein. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation.

PTPRC contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP.

PTPRC has been shown to be an essential regulator of T- and B-cell antigen receptor signaling as PTPRC positive regulate T-cell coactivation upon binding to DPP4, recruiting and dephosphorylating SKAP1 and FYN. PTPRC also dephosphorylates LYN, and thereby modulates LYN activity.

PTPRC 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. PTPRC also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling.

PTPRC gene has many alternatively spliced transcripts variants, which encode distinct isoforms^{[1][2][3]}.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA