Product Datasheet

PTPRC Antibody

Catalog No: #32607

Package Size: #32607-1 50ul #32607-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

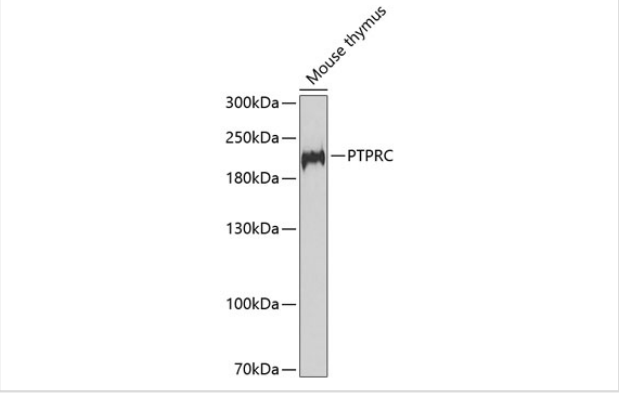
Description

Product Name	PTPRC Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total PTPRC protein.
Immunogen Type	Peptide
Immunogen Description	A synthetic peptide of human PTPRC.
Target Name	PTPRC
Other Names	B220; CD45; CD45R; GP180; LCA
Accession No.	Swiss-Prot:P08575NCBI Gene ID:5788
Uniprot	P08575
GeneID	5788;
SDS-PAGE MW	147KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

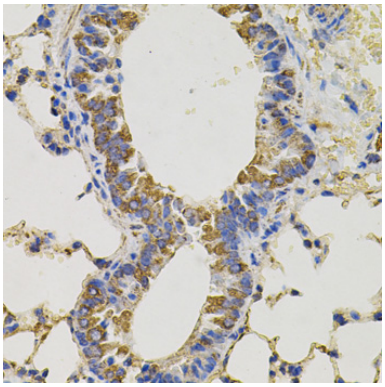
Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:200IF□1:50 - 1:200

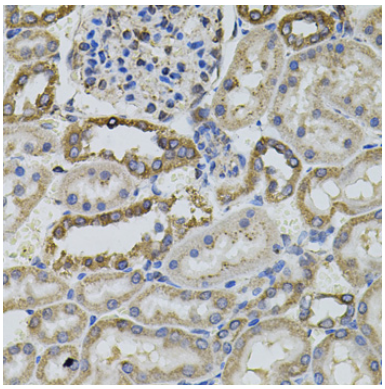
Images



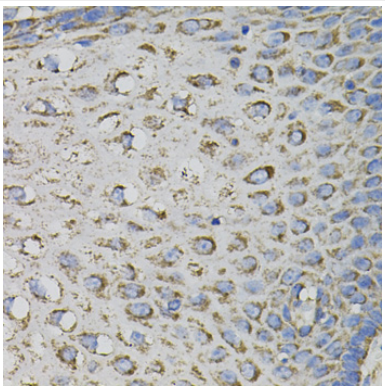
Western blot analysis of extracts of mouse thymus, using PTPRC at 1:1000 dilution.



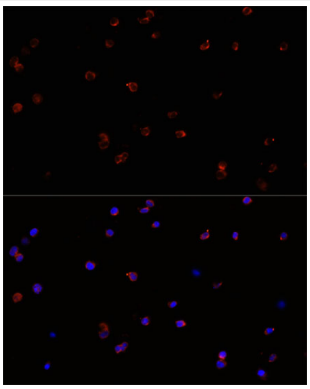
Immunohistochemistry of paraffin-embedded mouse lung using PTPRC (40x lens).



Immunohistochemistry of paraffin-embedded rat kidney using PTPRC (40x lens).



Immunohistochemistry of paraffin-embedded human esophagus using PTPRC (40x lens).



Immunofluorescence analysis of Jurkat cells using PTPRC at dilution of 1:100. Blue: DAPI for nuclear staining.

Background

The protein phosphatase (PTP) receptor CD45 is a type I transmembrane protein comprised of a pair of intracellular tyrosine phosphatase domains and a variable extracellular domain generated by alternative splicing (1). The catalytic activity of CD45 is a function of the first phosphatase domain (D1) while the second phosphatase domain (D2) may interact with and stabilize the first domain, or recruit/bind substrates (2,3). CD45 interacts directly with antigen receptor complex proteins or activates Src family kinases involved in the regulation of T- and B-cell antigen receptor signaling (1). Specifically, CD45 dephosphorylates Src-family kinases Lck and Fyn at their conserved negative regulatory carboxy-terminal tyrosine residues and upregulates kinase activity. Conversely, studies indicate that CD45 can also inhibit Lck and Fyn by dephosphorylating their positive regulatory autophosphorylation site. CD45 appears to be both a positive and a negative regulator that conducts signals depending on specific stimuli and cell

type (1). Human leukocytes including lymphocytes, eosinophils, monocytes, basophils and neutrophils express CD45, while erythrocytes and platelets are negative for CD45 expression (4).

Note: This product is for in vitro research use only