Best Tools for immunology Research

CD45 (phospho Ser1007) Polyclonal Antibody

Catalog No :	YP0543
Reactivity :	Human;Mouse;Rat
Applications :	WB;IF;ELISA
Target :	CD45
Fields :	>>Cell adhesion molecules;>>T cell receptor signaling pathway;>>Fc gamma R-mediated phagocytosis;>>Salmonella infection;>>Primary immunodeficiency
Gene Name :	PTPRC
Protein Name :	Receptor-type tyrosine-protein phosphatase C
Human Gene Id :	5788
Human Swiss Prot No :	P08575
Mouse Swiss Prot No :	P06800
Rat Gene Id :	24699
Rat Swiss Prot No :	P04157
Immunogen :	The antiserum was produced against synthesized peptide derived from human CD45 around the phosphorylation site of Ser1007. AA range:981-1030
Specificity :	Phospho-CD45 (S1007) Polyclonal Antibody detects endogenous levels of CD45 protein only when phosphorylated at S1007.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 150kD

Cell Pathway : Cell adhesion molecules (CAMs);T_Cell_Receptor;Fc gamma R-mediated phagocytosis;Primary immunodeficiency;

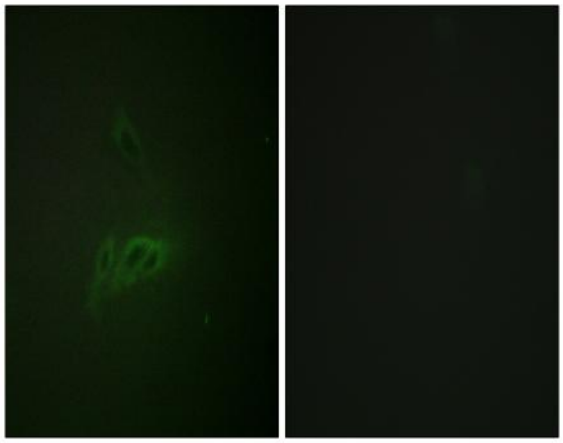
Background : The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular 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 enc

Function : alternative products:At least 8 isoforms are produced,catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,disease:Defects in PTPRC are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (T(-)B(+)NK(+)SCID) [MIM:608971]. SCID refers to a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients with SCID present in infancy with recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development.,disease:Genetic variations in PTPRC are involved in multiple sclerosis susceptibility (MS) [MIM:126200]. MS is a neurodegenerative dis

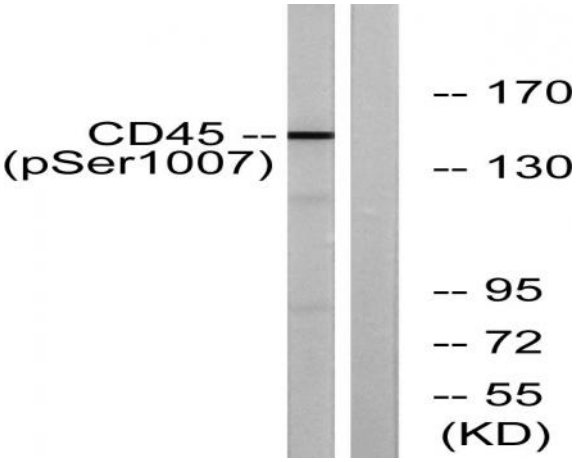
Subcellular Location : Cell membrane ; Single-pass type I membrane protein . Membrane raft . Colocalized with DPP4 in membrane rafts. .

Expression : Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes. Isoform 8: Not detected in thymocytes.

Products Images



Immunofluorescence analysis of HeLa cells, using CD45 (Phospho-Ser1007) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with TNF 20ng/ml 15', using CD45 (Phospho-Ser1007) Antibody. The lane on the right is blocked with the phospho peptide.