

CD45 Monoclonal Antibody

Catalog No :	YM0128
Reactivity :	Human
Applications :	WB;IHC;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
Immunogen :	Purified recombinant fragment of CD45 expressed in E. Coli.
Specificity :	CD45 Monoclonal Antibody detects endogenous levels of CD45 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	147kD

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

P References : 1. Biol Chem. 2008 May;389(5):561-8.
2. Immunology. 2008 Dec;125(4):558-69.

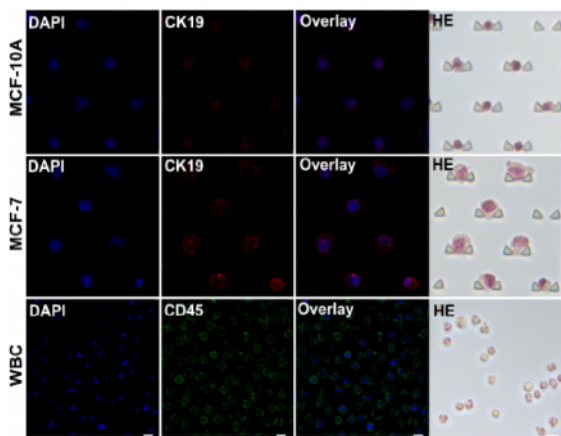
Background : The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular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

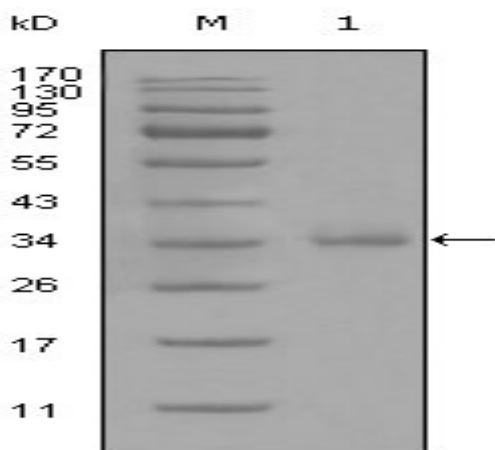
Subcellular Location : Cell membrane ; Single-pass type I membrane protein . Membrane raft . Colocalized with DPP4 in membrane rafts. .

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.

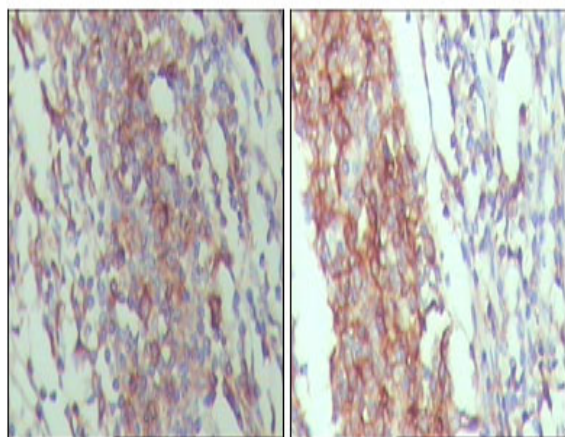
Products Images



Combined Molecular and Morphological Imaging of CTCs for HER2-Targeted Chemotherapy Guidance. ANALYTICAL CHEMISTRY Bo Tang IF Human 1:100 SKBR3 cell, MCF-7 cell, MDA-MB-231 cell



Western Blot analysis using CD45 Monoclonal Antibody against truncated CD45 recombinant protein (1).



Immunohistochemistry analysis of paraffin-embedded human lymph node tissue, showing membrane and cytoplasmic localization with DAB staining using CD45 Monoclonal Antibody.