



CD45 Monoclonal Antibody(12A9)

Catalog No	YP-Ab-13825
Isotype	IgG
Reactivity	Human
Applications	IF;WB;IHC;
Gene Name	PTPRC
Protein Name	Receptor-type tyrosine-protein phosphatase C
Immunogen	Synthetic Peptide of CD45
Specificity	The antibody detects endogenous CD45 proteins.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IF: 1:50-200 WB: 1:2000 IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PTPRC; CD45; Receptor-type tyrosine-protein phosphatase C; Leukocyte common antigen; L-CA; T200; CD45
Observed Band	147kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Membrane raft . Colocalized with DPP4 in membrane rafts. .
Tissue Specificity	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.
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



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

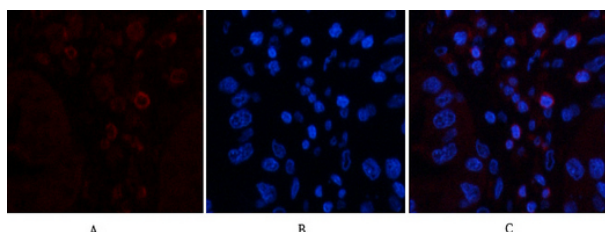
matters needing attention

Avoid repeated freezing and thawing!

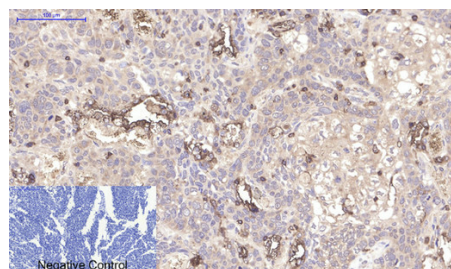
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

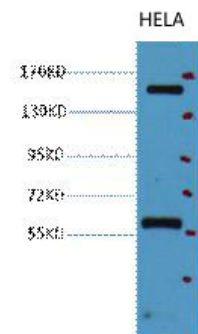
Products Images



Immunofluorescence analysis of human-liver-cancer tissue. 1, CD45 Monoclonal Antibody(12A9)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1, CD45 Monoclonal Antibody(12A9) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Western blot analysis of HELA, diluted at 1:2000.