# PTPRU Monoclonal Antibody

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| **Catalog No** | YP-mAb-06070 |
| **Isotype** | IgG |
| **Reactivity** | Human;Mouse |
| **Applications** | WB |
| **Gene Name** | PTPRU FMI PCP2 PTPRO |
| **Protein Name** | Receptor-type tyrosine-protein phosphatase U (R-PTP-U) (EC 3.1.3.48) (Pancreatic carcinoma phosphatase 2) (PCP-2) (Protein-tyrosine phosphatase J) (PTP-J) (hPTP-J) (Protein-tyrosine phosphatase pi) (P |
| **Immunogen** | Synthesized peptide derived from human protein . at AA range: 270-350 |
| **Specificity** | PTPRU Monoclonal Antibody detects endogenous levels of protein. |
| **Formulation** | Liquid in PBS containing 50% glycerol, and 0.02% sodium azide. |
| **Source** | Monoclonal, Mouse,IgG |
| **Purification** | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Dilution** | WB 1:500-1:2000 |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | |
| **Observed Band** | 159kD |
| **Cell Pathway** | Cell junction . Cell membrane ; Single-pass type I membrane protein . |
| **Tissue Specificity** | High levels in brain, pancreas, and skeletal muscle; less in colon, kidney, liver, stomach, and uterus; not expressed in placenta and spleen. Also detected in heart, prostate, lung, thymus, testis and ovary. Ubiquitously expressed in brain. Expressed by hematopoietic stem cells. |
| **Function** | catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,developmental stage:Expressed in fetal brain, lung and kidney.,function:Tyrosine-protein phosphatase which dephosphorylates CTNNB1. Regulates CTNNB1 function both in cell adhesion and signaling. May function in cell proliferation and migration and play a role in the maintenance of epithelial integrity. May play a role in megakaryocytopoiesis.,induction:Up-regulated upon cell contact (at protein level). Down-regulated by phorbol ester (at protein level) and calcium ionophore but up-regulated by phorbol ester in megakaryocytic cells (PubMed:10397721).,PTM:N-glycosylated.,PTM:Phosphorylated on tyrosine residues upon activation of KIT with stem cell factor (SCF). The 73 kDa proteolytic product is not phosphorylated.,PTM:The extracellular domain is proteolytically processed through cleavage within the fibron |

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| **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, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region, a single transmembrane region, and two tandem intracellular catalytic domains, and thus represents a receptor-type PTP. The extracellular region contains a meprin-A5 antigen-PTP (MAM) domain, Ig-like and fibronectin type III-like repeats. This PTP was thought to play roles in cell-cell recognition and adhesion. Studies of the similar gene in mice suggested the role of this PTP in early neural development. The expression of this gene was reported to be regulated by phorbol myristate acetate (PMA) or calcium ionophore in Jurkat T lymphoma cells. Alternatively spliced trans |
| **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