Immunotag™ PTPRU Polyclonal Antibody

Antibody Specification

Catalog No.	ITN1199
Product Description	Immunotag™ PTPRU Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PTPRU
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	Synthesized peptide derived from human protein . at AA range: 270-350
Specificity	PTPRU Polyclonal Antibody detects endogenous levels of protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Gene Name	PTPRU FMI PCP2 PTPRO
Accession No.	Q92729 B1AUH1

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Description	protein tyrosine phosphatase, receptor type U(PTPRU) Homo sapiens 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
Protein Expression	Brain,Mammary gland,Pancreas,Skeletal muscle,
Subcellular Localization	plasma membrane,integral component of plasma membrane,cell-cell junction,
Protein 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 fibronectin type-III 4 domain (By similarity). Beside the 190 kDa full-length protein, proteolytic products of 100 kDa, 80 kDa and 73 kDa are observed.,sequence caution:Several sequencing problems.,similarity:Belongs to the protein-tyrosine phosphatase family. Receptor class 2B subfamily.,similarity:Contains 1 Ig-like C2-type (immunoglobulin-like) domain.,similarity:Contains 1 MAM domain.,similarity:Contains 2 tyrosine-protein phosphatase domains.,similarity:Contains 4 fibronectin type-III domains.,subunit:Forms homooligomeric complexes which mediate cell homotypic adhesion (Probable). Interacts (via the cytoplasmic juxtamembrane domain) with CTNNB1; may mediate interaction with the cadherin/catenin adhesion complex. Interacts with KIT. May interact with AP3B1.,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.,
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