

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human and rat PTP π /PTPRU in Western blots and recombinant human PTPRU in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) PTPRK, rhPTPRM, or rhPTPRT is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 764209
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human PTP π /PTPRU Glu19-Gln740 Accession # Q92729
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Protein Tyrosine Phosphatase, receptor type U (PTPRU), also called PCP-2 or PTPp, is an approximately 180 kDa type I transmembrane glycoprotein that is a type IIb receptor-like protein tyrosine phosphatase (PTPR). The 731 amino acid (aa) extracellular domain contains MAM, Ig-like C-type and Fibronectin III domains that often mediate cell adhesion, but unlike other family members, PTPRU does not appear to mediate homophilic cell aggregation. It does, however, antagonize Wnt signaling in adherens junctions by inhibiting β -catenin-mediated gene transcription. Human PTPRU shares 95% aa sequence identity with mouse and rat PTPRU within the extracellular domain, and up to 60% aa identity with other human family members. Isoforms of 1436, 1440 and 1433 aa are altered within the cytoplasmic domain as compared to the 1446 aa full-length form. Several tissues contain detectable amounts of PTPRU mRNA.

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