

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 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.