

DESCRIPTION

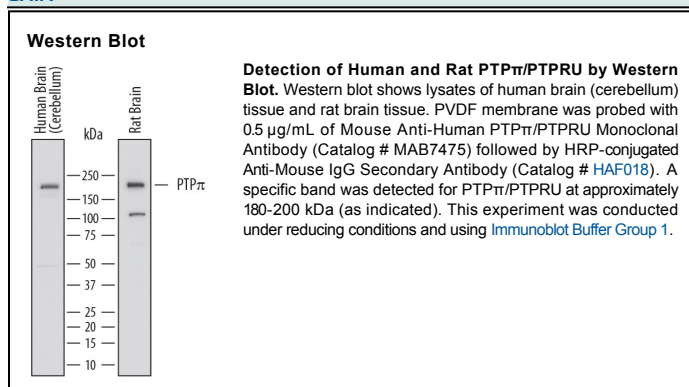
| | |
|---------------------------|---|
| Species Reactivity | Human/Rat |
| Specificity | Detects human and rat PTP π /PTPRU in Western blots and recombinant human PTPRU in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) PTPRK, rhPTPRM, or rhPTPRT is observed. |
| Source | 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 |
| Formulation | Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS. |

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.

| | Recommended Concentration | Sample |
|---------------------|---------------------------|-----------|
| Western Blot | 0.5 μ g/mL | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.5 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

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.