

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PTPR γ in Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant PTPRM, PTPRK, PTPRS, LAR, and DEP1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PTPR γ Ser111-Ala541 Accession # P23470
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

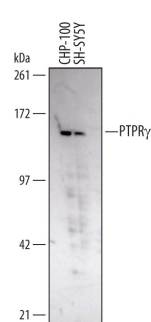
APPLICATIONS

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	1 μ g/mL	See Below
Immunohistochemistry	5-15 μ g/mL	See Below

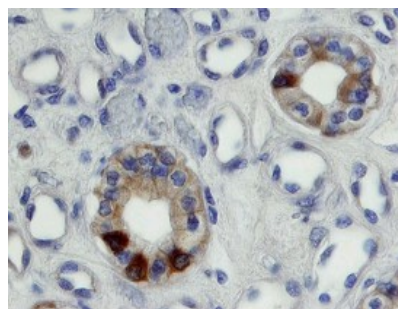
DATA

Western Blot



Detection of Human PTPR γ by Western Blot. Western blot shows lysates of CHP-100 human neuroblastoma cell line and SH-SY5Y human neuroblastoma cell line. PVDF membrane was probed with 1 μ g/mL of Goat Anti-Human PTPR γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4608) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for PTPR γ at approximately 160 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



PTPR γ in Human Kidney. PTPR γ was detected in immersion fixed paraffin-embedded sections of human kidney using 15 μ g/mL Goat Anti-Human PTPR γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4608) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of epithelial cells in tubules. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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 gamma (PTPR γ), also called PTPRG and PTPG, is a transmembrane protein. Its extracellular region contains carbonic anhydrase and Fibronectin III domains, suggesting that it interacts with adhesion molecules, but the only reported activator is an intracellular ATP-dependent factor. During brain development, PTPR γ is found exclusively in post-mitotic neurons. A wide variety of cancers, including colon, renal clear cell, lung, breast, and cervical cancers, show a high incidence of defects in the *PTPR γ* gene, suggesting the protein has a key regulatory function in tumor suppression.