

DESCRIPTION

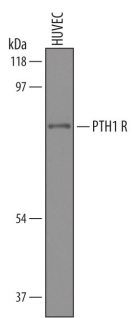
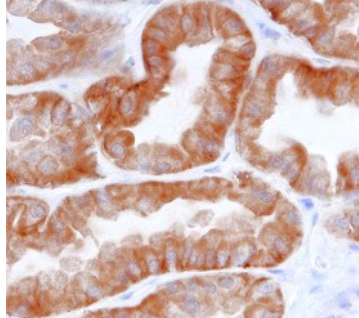
Species Reactivity	Human
Specificity	Detects human PTH1 R in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human PTH1 R Tyr23-Met189 Accession # Q03431
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm 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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human PTH1 R by Western Blot. Western blot shows lysates of HUVEC human umbilical vein endothelial cells. PVDF membrane was probed with 1 µg/mL of Human PTH1 R Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5709) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PTH1 R at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunohistochemistry</p>  <p>PTH1 R in Human Kidney. PTH1 R was detected in immersion fixed paraffin-embedded sections of human kidney using Sheep Anti-Human PTH1 R Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5709) at 10 µg/mL overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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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. *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

PTH1 R (Parathyroid hormone receptor # 1; also PTH/PTHr receptor) is a predicted 66 - 68 kDa member of the G-protein coupled receptor family # 2. It is expressed on a variety of cell types, including hepatocytes, renal epithelium, smooth muscle cells, and osteoblasts plus chondrocytes. PTH1 R is a receptor for both PTH and PTHrP, and PTH binding promotes Ca⁺⁺-release from bone, mediated by osteoclast formation. Mature human PTH1 R is a 7-transmembrane glycoprotein 567 amino acids (aa) in length. It contains a long, ligand-binding N-terminal extracellular region (aa 27 - 188) and a 130 aa cytoplasmic C-terminal domain. Single aa changes such as Gly121Glu, Ala122Thr and Arg255His can impair PTH1 R signaling. Over aa 1 - 189, human PTH1 R shares 88% aa identity with mouse PTH1 R.