

Anti-PTHR1 Antibody

Rabbit polyclonal antibody to PTHR1 Catalog # AP60374

Specification

Anti-PTHR1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IF/IC, IHC <u>O03431</u> Human, Mouse, Rat, Pig, Bovine, Dog Rabbit Polyclonal 66361

Anti-PTHR1 Antibody - Additional Information

Gene ID 5745

Other Names PTHR; PTHR1; Parathyroid hormone/parathyroid hormone-related peptide receptor; PTH/PTHrP type I receptor; PTH/PTHr receptor; Parathyroid hormone 1 receptor; PTH1 receptor

Target/Specificity Recognizes endogenous levels of PTHR1 protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-PTHR1 Antibody - Protein Information

Name PTH1R {ECO:0000303|PubMed:10913300, ECO:0000312|HGNC:HGNC:9608}

Function

G-protein-coupled receptor for parathyroid hormone (PTH) and for parathyroid hormone-related peptide (PTHLH) (PubMed:10913300, PubMed:10913300, PubMed:18375760, PubMed:19674967, PubMed:27160269, PubMed:27160269, PubMed:30975883, PubMed:<a href="http://www.uniprot.org/citations/35932760"



target="_blank">35932760, PubMed:8397094). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (cAMP) (PubMed:30975883, PubMed:35932760). PTH1R is coupled to G(s) G alpha proteins and mediates activation of adenylate cyclase activity (PubMed:20172855, PubMed:30975883, PubMed:30975883, PubMed:30975883, PubMed:30975883, PubMed:35932760). PTHLH dissociates from PTH1R more rapidly than PTH; as consequence, the cAMP response induced by PTHLH decays faster than the response induced by PTH (PubMed:35932760).

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Cellular Location Cell membrane; Multi-pass membrane protein

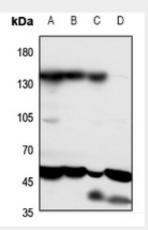
Tissue Location Expressed in most tissues. Most abundant in kidney, bone and liver.

Anti-PTHR1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

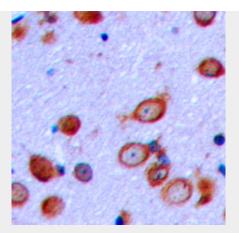
- Western Blot
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-PTHR1 Antibody - Images

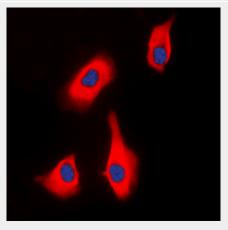


Western blot analysis of PTHR1 expression in mouse lung (A), mouse kidney (B), rat lung (C), rat kidney (D) whole cell lysates.





Immunohistochemical analysis of PTHR1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PTHR1 staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Anti-PTHR1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PTHR1. The exact sequence is proprietary.