10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PTHR1 Antibody

Catalog # AP60374

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q03431
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66361

Additional Information

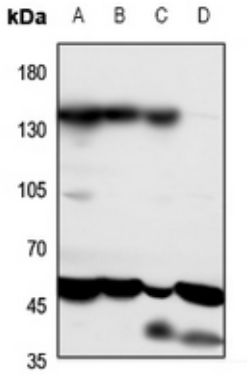
Gene ID	5745
Other Names	PTHR; PTHR1; Parathyroid hormone/parathyroid hormone-related peptide receptor; PTH/PTHrP type I receptor; PTH/PTHr receptor; Parathyroid hormone 1 receptor; PTH1 receptor
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PTHR1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

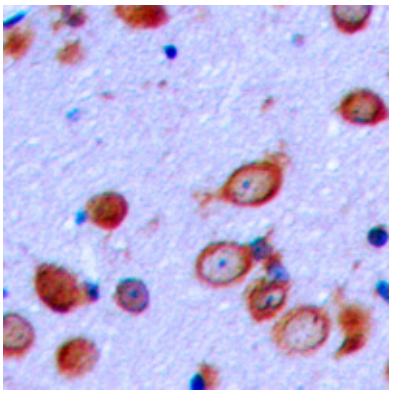
Name	PTH1R {ECO:0000303|PubMed:10913300, ECO:0000312|HGNC:HGNC:9608}
Function	G protein-coupled receptor for parathyroid hormone (PTH) and for parathyroid hormone-related peptide (PTHLH) (PubMed:10913300, PubMed:18375760, PubMed:19674967, PubMed:27160269, PubMed:30975883, PubMed:35932760, PubMed:8397094). 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: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).

Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expressed in most tissues. Most abundant in kidney, bone and liver.

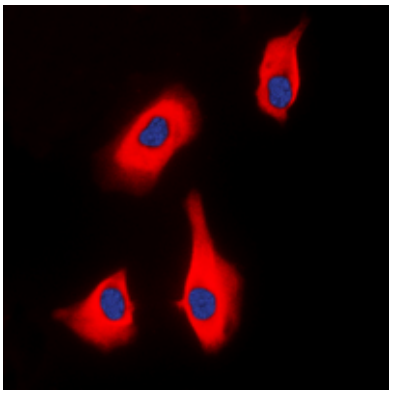
Images



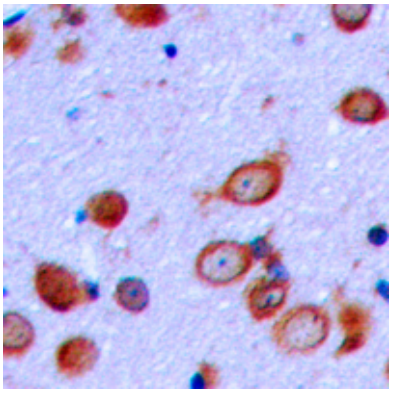
Western blot analysis of PTHR1 expression in mouse lung (A), mouse kidney (B), rat lung (C), rat kidney (D) whole cell lysates. (Predicted band size: 66 kD; Observed band size: 53 kD)



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).



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.