

# **Human PTH1R/PTHR1 Antibody**

Monoclonal Mouse IgG<sub>1</sub> Clone # 734630

Catalog Number: MAB5709

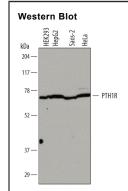
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human PTH1R/PTHR1 in direct ELISAs and Western blots.		
Source	Monoclonal Mouse IgG <sub>1</sub> Clone # 734630		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human PTH1R/PTHR1 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	2 μg/mL	See Below

#### DATA



Detection of Human PTH1R/PTHR1 by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line, HepG2 human hepatocellular carcinoma cell line. Saos-2 human osteosarcoma cell line, and HeLa human cervical epithelial carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human PTH1R/PTHR1 Monoclonal Antibody (Catalog # MAB5709) followed by HRPconjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PTH1R/PTHR1 at approximately 68 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot

## 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.
  - 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**

PTH1R (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. PTH1R is a receptor for both PTH and PTHrP, and PTH binding promotes Ca++-release from bone, mediated by osteoclast formation. Mature human PTH1R 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 PTH1R signaling. Over aa 1-189, human PTH1R shares 88% aa identity with mouse PTH1R.

