

# Rat Parathyroid Hormone protein, His and MBP tag (active)

# Cat. No. GTX00348-pro

Applications	Functional Assay	Package 10 μg
Species	Rat	. 13

# **Applications**

#### **Application Note**

PTH (Parathyroid hormone) is a hormone secreted by the parathyroid glands that is important in bone remodeling. As reported, osteoblast-like cell lines, such as ROS 17/2. 8, UMR1x10<sup>6</sup>, SaOS, U2OS, MG63, that exhibit PTHR1, respond with increased proliferation to PTH. Rat PTH shares similarities with human PTH in amino acid sequence with the identity of 71. 3%. Thus, a proliferation assay of rat recombinant PTH was conducted using U2OS cells. Briefly, U2OS cells were seeded into triplicate wells of 96-well plates at a density of 2000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of PTH. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of U2OS cells after incubation with PTH for 48h observed by inverted microscope. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant PTH for 48h. And PTH increased cell viability of U2OS cells.

Observed MW (kDa) 59 kDa.

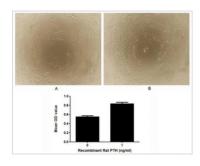
Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His and MBP-Tag; Ala32~Gln115 (NP_058740.1)	
Expression System	E. coli	
Purity	> 90%	
Endotoxin	< 1 EU/µg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	



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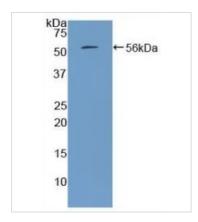
# DATA IMAGES



# **GTX00348-pro Functional Assay Image**

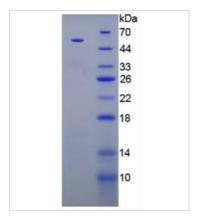
Cell proliferation effect of GTX00348-pro Rat Parathyroid Hormone protein (active). Cell viability was measured by Cell Counting Kit-8 (CCK-8).

- (A) Unstimulated U2OS cells cultured in DMEM for 48hrs.
- (B) U2OS cells cultured in DMEM, stimulated with 1 ng/ml PTH for 48hrs.



# GTX00348-pro Image

WB analysis of GTX00348-pro Rat Parathyroid Hormone protein (active).



# GTX00348-pro Image

SDS-PAGE analysis of GTX00348-pro Rat Parathyroid Hormone protein (active).



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