

APA866Hu01 10µg
Active Parathyroid Hormone (PTH)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Arg31~Gln115

Tags: N-terminal His-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 300µg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 9.1

Predicted Molecular Mass: 10.8kDa

Accurate Molecular Mass: 13kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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RSVSEIQLMH NLGKHLNSME  
RVEWLRKKLQ DVHNFVALGA PLAPRDAGSQ RPRKKEDNVL VESHEKSLGE  
ADKADVNVLT KAKSQ
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[ACTIVITY]

Parathyroid hormone (PTH) is an 84-amino-acid peptide hormone that is secreted by the parathyroid gland. PTH plays an osteogenic role by acting directly on mesenchymal stem cells, cells with an osteoblastic lineage, osteocytes, and T cells. It also participates as an osteoclast by indirectly acting on osteoclast precursor cells and osteoclasts and directly acting on T cells. PTH is major endocrine regulators of vitamin D metabolism. It proves, with data, this hormone a potent down-regulator of VDR. A functional binding ELISA assay was conducted to detect the interaction of recombinant human PTH and recombinant mouse VDR. Briefly, PTH was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to VDR-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PTH pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C.

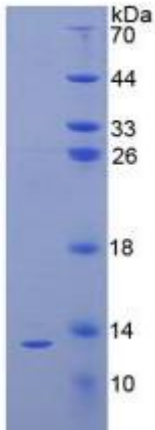


Figure 3. SDS-PAGE

Sample: Active recombinant PTH, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.