

## Product datasheet for RC219848

### Parathyroid Hormone (PTH) (NM\_000315) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Parathyroid Hormone (PTH) (NM_000315) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Parathyroid Hormone
Synonyms:	FIH1; PTH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>&gt;RC219848 ORF sequence  <b>Red</b>=Cloning site <b>Blue</b>=ORF <b>Green</b>=Tags(s)</p> <p>TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC<b>CGATCGCC</b></p> <p><b>ATGATACCTGCAAAGACATGGCTAAAGTTATGATTGTCATGTTGGCAATTTGTTTTCTTACAAAATCGGATGGGAAATCTGTTAAGAAGAGATCTGTGAGTAAATACAGCTTATGCATAACCTGGGAAAAATCTGAACTCGATGGAGAGAGTAGAATGGCTGCGTAAGAAGCTGCAGGATGTGCACAATTTGTTGCCCTTGGAGCTCCTCTAGCTCCCAGAGATGCTGGTCCAGAGGCCCGAAAAAGGAAGACAATGTCTTGTTGAGAGCCATGAAAAAAGTCTTGAGAGGCAGACAAAGCTGATGTGAATGTATTAACATAAAGCTAAATCCCAG</b></p> <p><b>ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA</b></p>
Protein Sequence:	<p>&gt;RC219848 protein sequence  <b>Red</b>=Cloning site <b>Green</b>=Tags(s)</p> <p>MIPAKDMAKVMIVMLAICFLTKSDGKSVKKRSVSEIQLMHNLGKHLNSMERVEWLRKKLQDVHNFVALGAPLAPRDAGSQRPRKEDNVLVESHEKSLGEADKADVNVLTAKASQ</p> <p><b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b></p>
Chromatograms:	<a href="https://cdn.origene.com/chromatograms/mk6451_f06.zip">https://cdn.origene.com/chromatograms/mk6451_f06.zip</a>
Restriction Sites:	SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_000315

**ORF Size:** 345 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
  5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_000315.4](#)

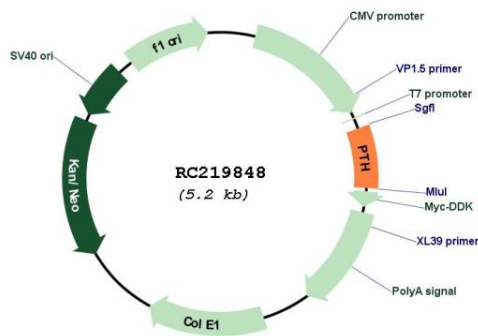
**RefSeq Size:** 828 bp

**RefSeq ORF:** 348 bp

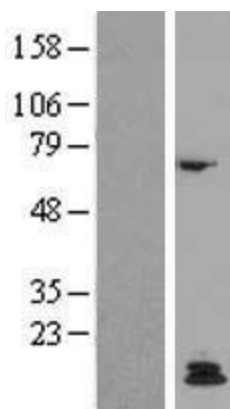
**Locus ID:** 5741  
**UniProt ID:** [P01270](#)  
**Cytogenetics:** 11p15.3  
**Protein Families:** Druggable Genome, Secreted Protein  
**MW:** 12.9 kDa

**Gene Summary:** This gene encodes a member of the parathyroid family of proteins. The encoded preproprotein is proteolytically processed to generate a protein that binds to the parathyroid hormone/parathyroid hormone-related peptide receptor and regulates blood calcium and phosphate levels. Excess production of the encoded protein, known as hyperparathyroidism, can result in hypercalcemia and kidney stones. On the other hand, defective processing of the encoded protein may lead to hypoparathyroidism, which can result in hypocalcemia and numbness. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2015]

### Product images:



Circular map for RC219848



Western blot validation of overexpression lysate (Cat# [LY424804]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219848 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).