

# **Product datasheet for RG219848**

### OriGene Technologies, Inc.

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## 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: TurboGFP

Symbol: PTH

Synonyms: FIH1; PTH1

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG219848 representing NM\_000315

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGATACCTGCAAAAGACATGGCTAAAGTTATGATTGTCATGTTGGCAATTTGTTTTCTTACAAAATCGG ATGGGAAATCTGTTAAGAAGAGATCTGTGAGTGAAATACAGCTTATGCATAACCTGGGAAAAACATCTGAA CTCGATGGAGAGAGTAGAATGGCTGCGTAAGAAGCTGCAGGATGTGCACAATTTTGTTGCCCTTGGAGCT CCTCTAGCTCCCAGAGATGCTGGTTCCCAGAGGCCCCGAAAAAAGGAAGACAATGTCTTGGTTGAGAGCC ATGAAAAAAGTCTTGGAGAGCAAACAAGCTGATGTGAATGTATTAACTAAAGCTAAATCCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG219848 representing NM\_000315

Red=Cloning site Green=Tags(s)

MIPAKDMAKVMIVMLAICFLTKSDGKSVKKRSVSEIQLMHNLGKHLNSMERVEWLRKKLQDVHNFVALGA

PLAPRDAGSQRPRKKEDNVLVESHEKSLGEADKADVNVLTKAKSQ

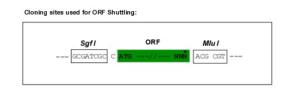
TRTRPLE - GFP Tag - V

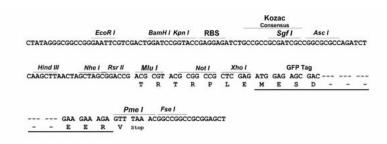
**Restriction Sites:** Sgfl-Mlul



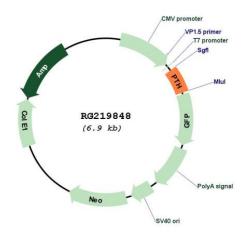


#### **Cloning Scheme:**





#### Plasmid Map:



**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



### Parathyroid Hormone (PTH) (NM\_000315) Human Tagged ORF Clone - RG219848

**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.

**RefSeq:** <u>NM 000315.4</u>

RefSeq Size: 828 bp
RefSeq ORF: 348 bp
Locus ID: 5741
UniProt ID: P01270
Cytogenetics: 11p15.3

**Protein Families:** Druggable Genome, Secreted Protein

**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]