

# Product datasheet for RG206584

#### OriGene Technologies, Inc.

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## Pancreatic Polypeptide (PPY) (NM\_002722) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Pancreatic Polypeptide (PPY) (NM\_002722) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: PPY

**Synonyms:** PNP; PP

Mammalian Cell

Selection:

Neomycin

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

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

ORF Nucleotide >RG206584 representing NM\_002722

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTGCCGCACGCCTCTGCCTCTCCCTGCTGCTCCTGTCCACCTGCGTGGCTCTGTTACTACAGCCAC
TGCTGGGTGCCCAGGGAGCCCCACTGGAGCCAGTGTACCCAGGGGACAATGCCACACCAGAGCAGATGGC
CCAGTATGCAGCTGATCTCCGTAGATACATCAACATGCTGACCAGGCCTAGGTATGGGAAAAGACACAAA
GAGGACACGCTGGCCTTCTCGGAGTGGGGGTCCCCGCATGCTGCTGCTCCCCAGGGAGCTCAGCCCGCTGG

**ACTTA** 

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206584 representing NM\_002722

Red=Cloning site Green=Tags(s)

MAAARLCLSLLLLSTCVALLLQPLLGAQGAPLEPVYPGDNATPEQMAQYAADLRRYINMLTRPRYGKRHK

EDTLAFSEWGSPHAAVPRELSPLDL

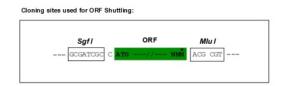
TRTRPLE - GFP Tag - V

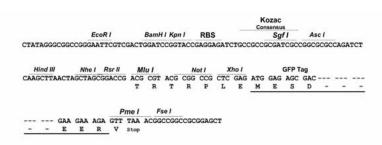
**Restriction Sites:** Sgfl-Mlul



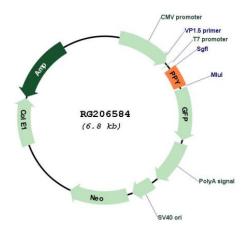


## **Cloning Scheme:**





## Plasmid Map:



**ACCN:** NM\_002722

ORF Size: 285 bp



**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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 002722.5</u>

 RefSeq Size:
 457 bp

 RefSeq ORF:
 288 bp

 Locus ID:
 5539

 UniProt ID:
 P01298

Cytogenetics: 17q21.31

**Protein Families:** Secreted Protein





#### **Gene Summary:**

This gene encodes a member of the neuropeptide Y (NPY) family of peptides. The encoded 95 aa preproprotein is synthesized in the pancreatic islets of Langerhans and proteolytically processed to generate two peptide products. These products include the active pancreatic hormone of 36 aa and an icosapeptide of unknown function. This hormone acts as a regulator of pancreatic and gastrointestinal functions and may be important in the regulation of food intake. Plasma level of this hormone has been shown to be reduced in conditions associated with increased food intake and elevated in anorexia nervosa. In addition, infusion of this hormone in obese rodents has shown to decrease weight gain. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]