

Product datasheet for **RG205199**

PTS (NM_000317) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PTS (NM_000317) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PTS
Synonyms: PTPS
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG205199 representing NM_000317
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCACGGAAGGTGGTGGCCGTCGCTGCCAGGCACAAGTGTCCCGCCGATCTCCTTCAGCGCGAGCC
ACCGATTGTACAGTAAATTTCTAAGTGATGAAGAAAACCTGAAACTGTTGGGAAATGCAACAATCCAAA
TGGCCATGGGCACAATTATAAAGTTGTGGTGACAGTACATGGAGAGATTGACCCTGCTACGGGAATGGTT
ATGAATCTGGCTGATCTCAAAAAATATATGGAGGAGCGATTATGCAGCCCTTGATCATAAGAATCTGG
ATATGGATGTGCCATACTTTCAGATGTTGTGAGCACGACTGAAAATGTAGCTGTTTATATGTGGGACAA
CCTCCAGAAAGTTCTTCCTGTAGGAGTTCTTTATAAAGTAAAAGTATACGAAACTGACAATAATATTGTG
GTTTATAAAGGAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG205199 representing NM_000317
Red=Cloning site Green=Tags(s)

MSTEGGRRRCQAQVSRRI SF SASHRLYSKFLSDEENLKLFGKCNPNNGHGHNYKVVVTVHGEIDPATGMV
MNLADLKKYMEEAIMQPLDHNLDMDVPYFADVVSTTENAVVYMWDLQKVLVPGVLYKVKVYETDNNIV
VYKGE

TRTRPLE - GFP Tag - V

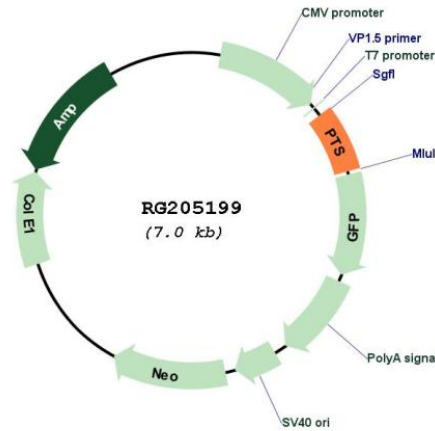
Restriction Sites: Sgfl-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_000317

ORF Size: 435 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:	<ol style="list-style-type: none">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_000317.1, NP_000308.1</u>
RefSeq Size:	921 bp
RefSeq ORF:	438 bp
Locus ID:	5805
UniProt ID:	<u>Q03393</u>
Cytogenetics:	11q23.1
Domains:	PTPS
Protein Families:	Druggable Genome
Protein Pathways:	Folate biosynthesis, Metabolic pathways
Gene Summary:	The enzyme encoded by this gene catalyzes the elimination of inorganic triphosphate from dihydroneopterin triphosphate, which is the second and irreversible step in the biosynthesis of tetrahydrobiopterin from GTP. Tetrahydrobiopterin, also known as BH(4), is an essential cofactor and regulator of various enzyme activities, including enzymes involved in serotonin biosynthesis and NO synthase activity. Mutations in this gene result in hyperphenylalaninemia. [provided by RefSeq, Oct 2008]