

## Product datasheet for **RG225819**

### Thymidine Phosphorylase (TYMP) (NM\_001113755) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Thymidine Phosphorylase (TYMP) (NM_001113755) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Thymidine Phosphorylase
Synonyms:	ECGF; ECGF1; hPD-ECGF; MEDPS1; MNGIE; MTDPS1; PDECGF; TP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG225819 representing NM\_001113755  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAGCCTTGATGACCCCGGAACCGGGGCCACCCGCGCCTGGTGACTTCTCCGGGAAGGGAGCC  
 AGGGACTTCCCGACCTTCGCCAGAGCCCAAGCAGCTCCCGGAGCTGATCCGCATGAAGCGAGACGGAGG  
 CCGCCTGAGCGAAGCGGACATCAGGGGCTTCGTGGCCGCTGTGGTGAATGGGAGCGCGCAGGGCGCACAG  
 ATCGGGGCCATGCTGATGGCCATCCGACTTCGGGGCATGGATCTGGAGGAGACCTCGGTGCTGACCCAGG  
 CCCTGGCTCAGTCGGGACAGCAGCTGGAGTGGCCAGAGGCTGGCGCCAGCAGCTTGTGGACAAGCATT  
 CACAGGGGGTGTGGGTGACAAGGTGAGCCTGGTCTCGCACCTGCCCTGGCGGCATGTGGCTGCAAGGTG  
 CCAATGATCAGCGGACGTGGTCTGGGGCACACAGGAGGCACCTTGATAAGCTGGAGTCTATTCTGGAT  
 TCAATGTCATCCAGAGCCAGAGCAGATGCAAGTCTGCTGGACCAGCGGGCTGCTGTATCGTGGGTCA  
 GAGTGAGCAGCTGGTTCCTGCGGACGGAATCCTATATGCAGCCAGAGATGTGACAGCCACCGTGGACAGC  
 CTGCCACTCATCAGACCTCCATTCTCAGTAAGAACTCGTGGAGGGGCTGTCCGCTCTGGTGGTGGACG  
 TTAAGTTCGGAGGGGCCCGCTTCCCAACCCAGGAGCAGGCCCGGGAGCTGGCAAAGACGCTGGTTGG  
 CGTGGGAGCCAGCCTAGGGCTTCGGGTCCGGCAGCGCTGACCGCATGGACAAGCCCTGGGTCTGCTG  
 GTGGGCCACGCCCTGGAGGTGGAGGAGGCGCTGCTCTGCATGGACGGCGCAGGCCCGCCAGACTTAAGGG  
 ACCTGGTCAACACGCTCGGGGGCGCCCTGCTCTGGCTCAGCGGACACCGGGGACTCAGGCCCAGGGCGC  
 TGCCCGGTGGCCGCGCGCTGGACGACGGCTCGGCCCTGGCCGCTTCGAGCGGATGCTGGCGGCGCAG  
 GGCGTGGATCCCGGTCTGGCCGAGCCCTGTGCTCGGGAAGTCCCGCAGAACCCGGCAGCTGCTGCCTC  
 GCGCCCGGAGCAGGAGGAGCTGCTGGCGCCGACAGATGGCACCGTGGAGCTGGTCCGGGCGCTCCGCT  
 GCGCTGGTCTGCACGAGCTCGGGGCCGGCGCAGCCGCGCTGGGGAGCCGCTCCGCTGGGGGTGGGC  
 GCAGAGCTGCTGGTTCGAGTGGTTCAGAGGCTGCGCCGTGGGACCCCTGGCTCCGCTGCACCGGACG  
 GCCCGCGCTCAGCGGCCCGCAGAGCCGCGCCCTGCAGGAGGCGCTCGTACTCTCCGACCGCGCCATT  
 CGCCGCCCTCGCCCTTCGAGAGCTCGTTCTGCCGCCGACGAA

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG225819 representing NM\_001113755  
 Red=Cloning site Green=Tags(s)

MAALMTPGTGAPPAPGDFSGEGSQGLPDPSPPEPKQLPELIRMKRDGGRLSEADIRGFVAAVNVNSAQGAQ  
 IGAMLMAIRLRGMDLEETSVL TQALAQSGQQLWPEAWRQQLVDKHSTGGVGDVSLVLAPALAACGCKV  
 PMISGRGLGHTGGTLDKLESIPGFNVIQSPEQMQLLDQAGCCIVGQSEQLVPADGILYAARDVTATVDS  
 LPLITASILSKKLVEGLSALVVDVKFGGAAVFPNQEQARELAKTLVGVGASLGLRVAAL TAMDKPLGRC  
 VGHAEVEEALLCMDGAGPPDLRDLVTTLGGALLWL SGHAGTQAQGAARVAAALDDGSALGRFERMLAAQ  
 GVDPLARALCSGSPAERRQLLPRAREQEELLAPADGTVELVRALPLALVLHELGAGRSRAGEPLRLGVG  
 AELLVDVGQRLRRGTPWLRVHRDGPALSGPQSRALQEALVLSRAPFAAPSPFAELVLPQQ

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001113755

**ORF Size:** 1446 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 [custsupport@origene.com](mailto:custsupport@origene.com) 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. [More info](#)

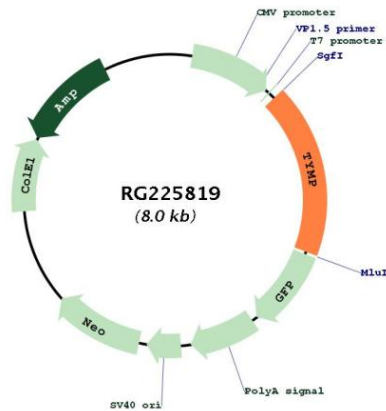
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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.

RefSeq:	<a href="#">NM_001113755.3</a>
RefSeq Size:	1679 bp
RefSeq ORF:	1449 bp
Locus ID:	1890
UniProt ID:	<a href="#">P19971</a>
Cytogenetics:	22q13.33
Protein Families:	Druggable Genome
Protein Pathways:	Bladder cancer, Drug metabolism - other enzymes, Metabolic pathways, Pyrimidine metabolism
Gene Summary:	This gene encodes an angiogenic factor which promotes angiogenesis in vivo and stimulates the in vitro growth of a variety of endothelial cells. It has a highly restricted target cell specificity acting only on endothelial cells. Mutations in this gene have been associated with mitochondrial neurogastrointestinal encephalomyopathy. Multiple alternatively spliced transcript variants have been identified. [provided by RefSeq, Apr 2012]

**Product images:**



Circular map for RG225819