

## Product datasheet for **RG222657**

### **PKMYT1 (NM\_004203) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PKMYT1 (NM_004203) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PKMYT1
Synonyms:	MYT1; PPP1R126
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG222657 representing NM\_004203  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTAGAACGGCCTCCTGCACTGGCCATGCCCATGCCACGGAGGGCACCCGCCACCTCTGAGTGGCA  
 CCCCCATCCCAGTCCCAGCCTACTTCCGCCACGAGAACCTGGATTCTCCCTCAAGAGGCCAGGGGGCT  
 CAGCCGGAGCCTCCACCTCCGCCCTGCCAAGGGCAGCATTCCCATCAGCCGCCTCTTCCCTCTCGG  
 ACCCCAGGCTGGCACCAGCTGCAGCCCCGGCGGTGTCATTCCGGGGCAGGCCTCAGAGACTCTGCAGA  
 GCCCTGGGTATGACCCAAGCCGGCCAGAGTCTTCTTCCAGCAGAGCTTCCAGAGGCTCAGCCGCCTGGG  
 CCATGGCTCTACGGAGAGGTCTTCAAGGTGCGCTCCAAGGAGGACGGCCGGCTCTATGCGGTAAGCGT  
 TCCATGTACCAATTCCGGGGCCCAAGGACCGGGCCGCAAGTTGGCCGAGGTGGCAGCCACGAGAAGG  
 TGGGGCAGCACCCATGCTGCGTGGCTGGAGCAGGCTGGGAGGAGGGCGCATCTGTACCTGCAGAC  
 GGAGCTGTGCGGGCCAGCCTGCAGCAACTGTGAGGCTGGGGTGCCAGCCTGCCTGAGGCCAGGTC  
 TGGGGCTACCTGCGGGACACGCTGCTTGCCTGGCCATCTGCACAGCCAGGGCCTGGTGCACCTTGATG  
 TCAAGCCTGCCAACATCTTCTGGGGCCCCGGGGCCGCTGCAAGCTGGGTGACTTCGGACTGCTGGTGGGA  
 GCTGGGTACAGCAGGAGCTGGTGAAGTCCAGGAGGGAGACCCCGCTACATGGCCCCGAGCTGCTGCAG  
 GGCTCCTATGGGACAGCAGCGGATGTGTTCACTGCTGGGCTCACCATCTGGAAGTGGCATGCAACATGG  
 AGCTGCCCCACGGTGGGGAGGGCTGGCAGCAGCTGCGCCAGGGCTACCTGCCCTGAGTTCACTGCCGG  
 TCTGTCTCCGAGCTGCGTTCTGTCTTGTGATGATGCTGGAGCCAGACCCCAAGCTGCGGGCCACGGCC  
 GAGGCCCTGCTGGCACTGCCTGTGTTGAGGCAGCCCGGGCCTGGGGTGTGCTGTGGTGCATGGCAGCGG  
 AGGCCCTGAGCCGAGGGTGGGCCCTGTGGCAGGCCCTGCTTGCCTGCTCTGCTGGCTCTGGCATGGGCT  
 GGCTCACCTGCCAGCTGGCTACAGCCCTGGGCCCGCCAGCCACCCCGCCTGGCTCACCACTGCACT  
 TTGCTCTGGACAGCAGCCTCTCCAGCAACTGGGATGACGACAGCCTAGGGCCTTCACTCTCCCCTGAGG  
 CTGTCTGGCCCCGACTGTGGGAGCACCTCCACCCCGGAGCAGGTGCACACCCAGGGATGCCCTGGA  
 CCTAAGTGACATCAACTCAGAGCCTCTCGGGCTCCTCCCCTCTTTGAGCCTCGGAACCTCCTCAGC  
 CTGTTTGGAGACACCCTAGACCCAACC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG222657 representing NM\_004203  
 Red=Cloning site Green=Tags(s)

MLERPPALAMPMPTEGTPPPLSGTPIPVPAFYRHAEPGFLSKRPRGLSRSLPPPPPAKGSIPISRLFPPR  
 TPGWHQLQPRRVSFRGEASETLQSPGYDPSRPESFFQQSFQRLSRLGHGSYGEVFKVRSKEDGRLYAVKR  
 SMSPFRRGPKDRARKLAEVGSHEKVGQHPCCVRLEQAWEEGGILYLQTELCGPSLQHQCEAWGASLPEAQV  
 WGYLRDTHLALHLHSQGLVHLDVKPANIFLGPGRCKLGFLLVELGTAGAGEVQEGDPRYMAPELLQ  
 GSYGTAADVFLGLTILEVACNMELPHGGEGWQQLRQGYLPPEFTAGLSSELRSVLVMMLEPDPKLRATA  
 EALLALPVLQRPAWGVLWMAAEALSRGWALWQALLALLCWLWHGLAHPASWLQPLGPPATPPGSPPCS  
 LLLDSSLSSNWDDSLGPSLSPEAVLARTVGSTSTPRSRCTPRDALDLSDINSEPPRGSFSPFEPRNLLS  
 LFEDTLDPT

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_004203

**ORF Size:** 1497 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.

**RefSeq:** [NM\\_004203.5](#)

**RefSeq Size:** 2121 bp

**RefSeq ORF:** 1500 bp

**Locus ID:** 9088

**UniProt ID:** [Q99640](#)

**Cytogenetics:** 16p13.3

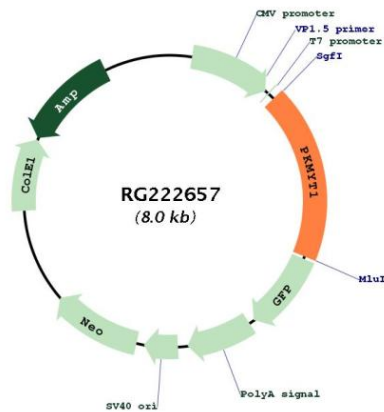
**Domains:** pkinase, TyrKc, S\_TKc

**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation

**Gene Summary:** This gene encodes a member of the serine/threonine protein kinase family. The encoded protein is a membrane-associated kinase that negatively regulates the G2/M transition of the cell cycle by phosphorylating and inactivating cyclin-dependent kinase 1. The activity of the encoded protein is regulated by polo-like kinase 1. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2012]

**Product images:**



Circular map for RG222657