

## Product datasheet for **SC323456**

### PKMYT1 (NM\_004203) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PKMYT1 (NM_004203) Human Untagged Clone
Tag:	Tag Free
Symbol:	PKMYT1
Synonyms:	MYT1; PPP1R126
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC323456 sequence for NM\_004203 edited (data generated by NextGen Sequencing)

```

ATGCTAGAACGGCCTCCTGCACTGGCCATGCCCATGCCACGGAGGGCACCCTGCCACCT
CTGAGTGGCACCCTCCAGTCCCAGCCTACTTCCGCCACGCAGAACCTGGATTCTCC
CTCAAGAGGCCAGGGGGCTCAGCCGGAGCCTCCCACCTCCGCCCCCTGCCAAGGGCAGC
ATTCCCATCAGCCGCCTCTTCCCTCCTCGGACCCAGGCTGGCACCAGCTGCAGCCCCGG
CGGGTGTCAATTCGGGGCGAGGCCCTCAGAGACTCTGCAGAGCCCTGGGTATGACCCAAGC
CGGCCAGAGTCCCTTCTCCAGCAGAGCTTCCAGAGGCTCAGCCGCTGGGCCATGGCTCC
TACGGAGAGGTCTTCAAGGTGCGCTCCAAGGAGGACGGCCGGCTCTATGCGGTAATGCGT
TCCATGTCAACATTCCGGGGCCCCAAGGACCGGGCCCGCAAGTTGGCCGAGGTGGGCAGC
CACGAGAAGGTGGGGCAGCACCCATGCTGCGTGCAGGCTGGAGCAGGCTGGGAGGAGGGC
GGCATCTGTACCTGCAGACGGAGCTGTGCGGGCCAGCCTGCAGCAACTGTGAGGCC
TGGGGTGCAGCCTGCCTGAGGCCAGGTCTGGGGCTACCTGCGGGACACGCTGCTTGCC
CTGGCCCATCTGCACAGCCAGGGCTGGTGCACCTTGATGTCAAGCCTGCCAACATCTTC
CTGGGGCCCCGGGGCCGCTGCAAGCTGGGTGACTTCGACTGCTGGTGGAGCTGGGTACA
GCAGGAGCTGGTGAAGTCCAGGAGGGAGACCCCGCTACATGGCCCCGAGCTGTGCAG
GGCTCCTATGGGACAGCAGCGGATGTGTTCACTGCTGGGCCTACCATCCTGGAAGTGGA
TGCAACATGGAGCTGCCACCGGTGGGAGGGCTGGCAGCAGCTGCGCCAGGGCTACCTG
CCCCCTGAGTTCACTGCCGGTGTGTCTCCGAGCTGCGTTCTGTCTTGTGATGCTG
GAGCCAGACCCCAAGCTGCGGGCCACGGCCGAGGCCCTGCTGGCACTGCCTGTGTTGAGG
CAGCCGCGGGCCTGGGGTGTGCTGTGGTGCATGGCAGCGGAGGCCCTGAGCCGAGGGTGG
GCCCTGTGGCAGGCCCTGCTTCCCTGCTCTGCTGGCTCTGGCATGGGCTGGCTCACCT
GCCAGCTGGTACAGCCCTGGGCCCGCCAGCCACCCCGCTGGTCAACCACCTGCAGT
TTGCTCCTGGACAGCAGCCTCTCCAGCAACTGGGATGACGACAGCCTAGGGCCTTCACTC
TCCCTGAGGCTGTCTGGCCCGACTGTGGGAGCACCTCCACCCCGGAGCAGGTGC
ACACCCAGGGATGCCCTGGACCTAAGTGACATCAACTCAGAGCCTCCTCGGGGCTCCTTC
CCCTCCTTGGAGCCTCGGAACCTCCTCAGCCTGTTTGGAGACACCCTAGACCCAACCTGA
    
```

Clone variation with respect to NM\_004203.4  
416 a=>t

**5' Read Nucleotide Sequence:**

>OriGene 5' read for mutant NM\_004203 unedited

```

ACCGCCGTATCAGCAACTGGGCGGTAGGCGCTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTGA
TGAACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCAGCAGGGCGCGCGTT
CACGGGCCGTTCCCCCTCACGGGAGTCTCCGCCGGCGTCCGGAACAGTTCGACGGCAGACTCCGGCCC
GCTGAGCCACCCGAGGGTCCCCTGGCCCTCCGCCGACCCGGAATCTGGCCCTCGCGGACCCGCCCCCG
CCAGTCGCCCAAGGGCTTCCCCACACCACGGAGTGAAGTCAAGTCAAGCCGCGCCCTGCCTGGGAGGAACTT
ACCGTCTACCGGAAAAGGTGGGCCAGCAGATGTGTCGGCCTGGTGAAGAGGGTGAAGGCGAAGACGGC
CCGATCGCCAAGGGCCCCGGAAGCTGCGGAGGTACCCCGCCCTGCCCTAAGCTCAGGGACACCCTGAAT
TCCTTGAACCCCTGTTTCTTGCCTCCCGTTCACCATTGAGGCTGTTGGGCCAGGCCAGTTATGCTA
AACGGCTCTGCTGGCCATGCCATCCCCGAGGGGCCCGCCCCCTTAAGGGCACAATACCATTGCAAC
TATTTTGCACCAACGGGTTTACCAAAGGCCAGGGCGTCC
    
```

**Kinase Domain Sequence:**

>SC323456 kinase domain raw sequence. By performing [BLASTX](#) analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation

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GSGRTCTTCTCAGCAGAGCTTCCAGAGGCTCAGCCGCTGGGCCATGGCTCCTACGGAGAGGTCTTCAAG
GTGCGCTCCAAGGAGGACGGCGGCTCTATGCGGTAATGCGTTCCATGTCAACATTCCGGGGCCCCAAGG
ACCGGGCCCGCAAGTTGGCCGAGGTGGGCAGCCACGAGAAGGTGGGGCAGCACCCATGCTGCGTGCAGG
GGAGCAGGCTGGGAGGAGGGCGGCATCCTGTACCTGCAGACGGA
    
```

**Restriction Sites:**

Please inquire

<b>ACCN:</b>	NM_004203
<b>Insert Size:</b>	2190 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <a href="#">Cell, 2008 May p536-548.</a>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_004203.3</a> , <a href="#">NP_004194.3</a>
<b>RefSeq Size:</b>	2121 bp
<b>RefSeq ORF:</b>	1500 bp
<b>Locus ID:</b>	9088
<b>UniProt ID:</b>	<a href="#">Q99640</a>
<b>Cytogenetics:</b>	16p13.3
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (1) encodes the longest isoform (1).</p>