

## Product datasheet for **SC128265**

### PTGS1 (NM\_000962) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTGS1 (NM_000962) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTGS1
Synonyms:	COX1; COX3; PCOX1; PES-1; PGG/HS; PGHS-1; PGHS1; PHS1; PTGHS
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC128265 sequence for NM\_000962 edited (data generated by NextGen Sequencing)

```

ATGAGCCGGAGTCTTTGCTCCGGTTCTTGCTGTTCTGCTCCTGCTCCCGCCGCTCCCC
GTCCTGCTCGCGGACCCAGGGGCGCCACGCCAGTGAATCCCTGTTGTTACTATCCATGC
CAGCACCAGGGCATCTGTGTCGGCTTCGGCCTTGACCGTACCAGTGTGACTGCACCCGC
ACGGGCTATTCCGGCCCCAACTGCACCATCCCTGGCCTGTGGACCTGGCTCCGGAATTC
CTGCGGCCAGCCCTCTTTACCCACTTCTGCTCACTCACGGGCGCTGGTTCTGGGAG
TTTGTC AATGCCACCTTCATCCGAGAGATGCTCATGCGCCTGGTACTCACAGTGCCTCC
AACCTTATCCCCAGTCCCCCACCTACAACCTCAGCACATGACTACATCAGCTGGGAGTCT
TTCTCAAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCTAAAGATTGCCCCACA
CCCATGGGAACCAAAGGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGCCGCTTC
CTGCTCAGGAGGAAGTTCATACCTGACCCCAAGGCACCAACCTCATGTTTGCCTTCTTT
GCACAACACTTCAACCACAGTTCTTCAAACCTCTGGCAAGATGGGTCTGGCTTACC
AAGGCCTTGGCCATGGGTAGACCTCGGCCACATTTATGGAGACAATCTGGAGCGTCAG
TATCAACTGCGGCTCTTAAAGGATGGGAACTCAAGTACCAGGTGCTGGATGGAGAAATG
TACCCGCCCTCGGTAGAAGAGGCCCTGTGTTGATGCACTACCCCGAGGCATCCCGCCC
CAGAGCCAGATGGCTGTGGGCCAGGAGGTGTTGGGCTGCTTCTGGGCTCATGCTGTAT
GCCACGCTCTGGCTACGTGAGCACAACCGTGTGTGACCTGCTGAAGGCTGAGCACCCC
ACCTGGGGCGATGAGCAGCTTTCCAGACGACCCGCTCATCCTCATAGGGGAGACCATC
AAGATTGTCATCGAGGAGTACGTGCAGCAGCTGAGTGGCTATTTCTGCAGCTGAAATTT
GACCCAGAGCTGCTGTTCCGGTGTCCAGTTCCAATACCGCAACCGCATTGCCATGGAGTTC
AACCATCTTACCACTGGCACCCCTCATGCCTGACTCCTTCAAGGTGGGCTCCAGGAG
TACAGTACGAGCAGTTCTTGTTC AACACCTCCATGTTGGTGGACTATGGGGTTGAGGCC
CTGGTGGATGCCTTCTCTCGCCAGATTGCTGGCCGGATCGGTGGGGGCAGGAACATGGAC
CACCACATCCTGCATGTGGCTGTGGATGTATCAGGGAGTCTCGGGAGATGCGGCTGCAG
CCCTTCAATGAGTACCGCAAGAGGTTTGGCATGAAACCTACACCTCCTTCCAGGAGCTC
GTAGGAGAGAAGGAGATGGCAGCAGAGTTGGAGGAATTGTATGGAGACATTGATGCGTTG
GAGTTCTACCCTGGACTGCTTCTTGAAGAGTCCATCCAACTCTATCTTGGGGAGAGT
ATGATAGAGATTGGGGCTCCCTTTCCCTCAAGGGTCTCCTAGGGAATCCCATCTGTTCT
CCGGAGTACTGGAAGCCGAGCACATTTGGCGGCGAGGTGGGCTTAAACATTGTCAAGACG
GCCACACTGAAGAAGCTGGTCTGCCTCAACACCAAGACCTGTCCCTACGTTTCTTCCGT
GTGCCGGATGCCAGT CAGGATGATGGGCCTGCTGTGGAGCGACCATCCACAGAGCTCTGA
    
```

Clone variation with respect to NM\_000962.2  
22 t=>c

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_000962 unedited

```

GGTTTCCGGGCTATCACCCGCCGTTGCCCAAAGGGCGGTAGCGTGTACGGTGGGA
GGTCTATAAAGCAGAGCTCATTAGGTGACACTATAGAATACAAGCTACTTGTCTTTT
TGCAGCGCCGCAATTCGGCACGAGGCACAGGAGCCTGCACTCTGCGTCCCGCACCCCA
GCAGCCGCGCCATGAGCCGGAGTCTCTTGTCCGGTTCTTGTGTTCTGCTCCTGCTCC
CGCCGCTCCCGTCTGCTCGCGGACCCAGGGGCGCCACGCCAGTGAATCCCTGTTGTT
ACTATCCATGCCAGCACCAGGGCATCTGTGTCGGCTTCGGCCTTGACCGTACCAGTGTG
ACTGCACCCGACGGGCTATTCCGGCCCCAACTGCACCATCCCTGGCCTGTGGACCTGGC
TCCGGAATTCAGTGGGCCAGCCCTCTTTACCCACTTCTGCTCACTCACGGGCGCT
GGTTCTGGGAGTTGTCAATGCCACCTTCATCCGAGAGATGCTCATGCGCCTGGTACTCA
CAGTGGCTCCAACCTTATCCCCAGTCCCCCACCTACAACCTCAGCACATGACTACATCA
GCTGGGAGTCTTCTCCAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCTAAAG
ATTGCCCCACACCCATGGGAACCAAAGGAAAGAGCAGTTGCCAGATGCCAGCTCCTGG
CCC GCCGCTTCTGCTNCAAGAGGAAAGTCAACCTGACCCCAAGGCACCACTCATGTTT
GCCTTCTTTGCAAACACTTCAACCACAGTTCTNCAAACCTCTGGCAGATGGGNTCTGGNC
TCACAAGCCCTGGGCCATGGGTAGACCTCGCCACATTTAGGAC
    
```

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' genomic read for NM_000962 unedited AGCACTGGNGNAGGGGTACAGGGNATGCCACCCGGGTTCTGTTTCAGGAAAAGCTATGA CCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTTTTTTTTTACAGGATAACAACACTAGCATTACACTGTATTAGGTATTA TAAGTAATCTAGAGATGATTGAAGTTTTACAGGAGATTGCACATAGGTTATATGCAAATA CTATACCACTTTATATAAAGGACTTGAGGAACCCACAGATTTTGGTATCTGTAGAGATCCT GAAACAAATCCCCACAATACCAAAGGATGGCTGTATATAGCTTTATTTTTAAAAATTA ATTCACACAATTGTTGGGGTTGGCAAACCTCAAATCCATAGGGCAAACACTAGCAGGCTGGA AACTCAGGCAGGAGTCGATGGCTATAGTCTTGAGGCAAAGTTTCTCTTTTCCAGGAAAC TGCAGTGTGTTGTTCTTGAGGCCTTCAACTAATCAGGTGCAGCTCACCAAATTATTTAA GTAATCTCTTCACTTAAAGTCAACTGATTGTAGATGTTAATCACATCTACAAAATACCT TCACAGCCACACCTAGATTACTGTTTGATTAATAACTGTGTGCTATAGCCCAACCAAAC TGACAAAATAAACCAACCATCACATCCACCAAATCAAACCTCCGGGAACAAATGTTTAAA TTACAAGCATTAAAGATTCTCTCTGAAAACTTCTTGGTGCATTTAGCCTGTTTCCCT TTGCAAACTTTCATGTGCATTTGTACTACTAAAGCAAAGTCTACCTATCTAGGCCCTTG CATTAAG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_000962
<b>Insert Size:</b>	4900 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>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>	<u><a href="#">NM_000962.2</a></u> , <u><a href="#">NP_000953.2</a></u>
<b>RefSeq Size:</b>	5093 bp
<b>RefSeq ORF:</b>	1800 bp
<b>Locus ID:</b>	5742
<b>UniProt ID:</b>	<u><a href="#">P23219</a></u>
<b>Cytogenetics:</b>	9q33.2
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Arachidonic acid metabolism, Metabolic pathways

**Gene Summary:**

This is one of two genes encoding similar enzymes that catalyze the conversion of arachinodate to prostaglandin. The encoded protein regulates angiogenesis in endothelial cells, and is inhibited by nonsteroidal anti-inflammatory drugs such as aspirin. Based on its ability to function as both a cyclooxygenase and as a peroxidase, the encoded protein has been identified as a moonlighting protein. The protein may promote cell proliferation during tumor progression. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Transcript Variant: This variant (1) encodes isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.