

## Product datasheet for **RC238863**

### **PTGS1 (NM\_001271164) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PTGS1 (NM_001271164) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTGS1
Synonyms:	COX1; COX3; PCOX1; PES-1; PGG/HS; PGHS-1; PGHS1; PHS1; PTGHS
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC238863 representing NM\_001271164  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGCCGGAGTCTCTTGTCTGGTTCTTGTCTGTTCTCTGCTCCTGCTCCCGCCGCTCCCCGTCTGTCTCG  
 CGGACCCAGGGGCGCCACGCCAGTGAATCCCTGTTGTTACTATCCATGCCAGCACCAGGCATCTGTGT  
 CCGCTTCGGCCTTGACCGCTACCAGTGTGACTGCACCCGCACGGGCTATTCGGGCCCAACTGCACCATC  
 CCTGGCCTGTGGACCTGGCTCCGGAATTCAGTGCAGCCAGCCCTCTTTCACCCACTTCTGTCTACTC  
 ACGGGCGTGGTCTGGGAGTTTGTCAATGCCACCTTCATCCGAGAGATGCTCATGCGCCTGGTACTCAC  
 AGGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGCGCTTCTGTCTCAGGAGGAAGTTCATACT  
 GACCCCAAGGCACCACTCATGTTTGCCTTCTTTCACAACACTTCACCCACCAGTTCCTCAAACTT  
 CTGGCAAGATGGTCTGGCTTACCAAGCCTGGGCCATGGGTAGACCTCGCCACATTTATGGAGA  
 CAATCTGGAGCGTCAGTATCAACTGCGGCTCTTAAGGATGGGAACTCAAGTACCAGGTGCTGGATGGA  
 GAAATGTACCCGCCCTCGGTAGAAAGAGGCGCTGTGTTGATGCACTACCCCGAGGCATCCCGCCCA  
 GCCAGATGGCTGTGGCCAGGAGGTGTTGGGCTGCTTCTGGGCTCATGCTGTATGCCACGCTCTGGCT  
 ACGTGAGCACAACCGTGTGTGACCTGCTGAAGGCTGAGCACCCACCTGGGGCGATGAGCAGCTTTTC  
 CAGACGACCCGCCTATCCTCATAGGGGAGACCAAGATTGTCATCGAGGAGTACGTGCAGCAGCTGA  
 GTGGCTATTTCTGCAGCTGAAATTTGACCCAGAGCTGCTGTTCCGGTGTCCAGTTCACCAACCGC  
 CATTGCCATGGAGTTCACCATCTCTACCACTGGCACCCTCATGCCTGACTCCTTCAAGTGGGCTCC  
 CAGGAGTACAGCTACGAGCAGTCTTGTCAACACCTCCATGTTGGTGGACTATGGGGTTGAGGCCCTGG  
 TGGATGCCTTCTCTGCCAGATGCTGGCCGGATCGGTGGGGCAGGAACATGGACCACCATCTGCA  
 TGTGGCTGTGGATGTCATCAGGGAGTCTCGGGAGATCGGGCTGCAGCCCTTCAATGAGTACCGCAAGAGG  
 TTTGGCATGAAACCTACACCTCTCCAGGAGCTCGTAGGAGAGAAGGAGATGGCAGCAGAGTTGGAGG  
 AATTGTATGGAGACATTGATGCGTTGGAGTTCTACCCTGGACTGCTTCTTGAAGTGGCATCCAACTC  
 TATCTTTGGGAGAGTATGATAGAGATTGGGGCTCCCTTTTCCCTCAAGGGTCTCCTAGGGAATCCCATC  
 TGTTCTCCGGAGTACTGGAAGCCGAGCACATTTGGCGGCGAGGTGGGCTTAAACATTGTCAAGACGGCCA  
 CACTGAAGAAGCTGGTCTGCCTCAACCAAGACCTGTCCCTACGTTTCTTCCGTGTGCCGGATGCCAG  
 TCAGGATGATGGCCTGCTGTGGAGCGACCATCCACAGAGCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238863 representing NM\_001271164  
 Red=Cloning site Green=Tags(s)

MSRLLLLWFLFLLLLPLPVLLADPGAPTPVNPCCYYPQHQGICVRFGLDRYQDCDTRTGYSNPNTI  
 PGLWTWLRNSLRPSPSFTHFLLTHGRWFVFNATFIREMLMRLVLTGKKQLPDAQLLARRFLLRRKFIP  
 DPQGTNLMFAFFAQHFTHQFFKTSKMGPGFTKALGHGVDLGHIIYGDNLERQYQLRFLKDGKLLKYQVLDG  
 EMYPPSVEEAPVLMHYPRGIPPQSQMAVGQEVFGLLPGLMLYATLWLREHNRVCDLLKAEHPTWGDEQLF  
 QTRLILIGETIKIVIEEYVQQLSGYFLQLKFDPELLFGVQFQYRNRIAMEFNHLYHWHPLMPDSFKVGS  
 QEYSYEQFLFNTSMLVDYVEALVDAFSRQIAGRIGGGRNMDHHILHVAVDVIRESREMRLQPFNEYRKR  
 FGMKPYTSFQELVGEKEMAAEELYGDIDALEFYPLLLLEKCHPNSIFGESMIEIGAPFSLKGLLGNPI  
 CSPEYWKPSTFGGEVGFNIVKTATLKKLVCLNTKCPYVSFRVPDASQDDGPAVERPSTEL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

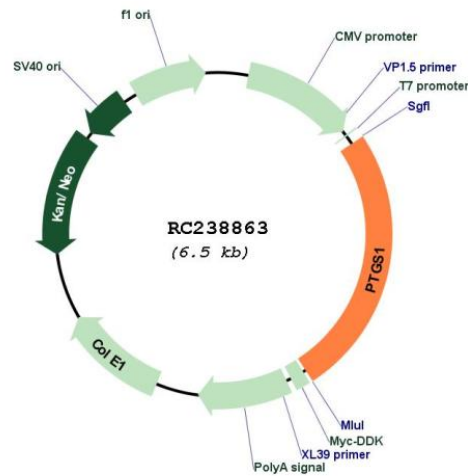
Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



<b>ACCN:</b>	NM_001271164
<b>ORF Size:</b>	1653 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_001271164.2</a>
<b>RefSeq Size:</b>	4901 bp
<b>RefSeq ORF:</b>	1656 bp
<b>Locus ID:</b>	5742
<b>Cytogenetics:</b>	9q33.2
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Arachidonic acid metabolism, Metabolic pathways
<b>MW:</b>	63.7 kDa
<b>Gene Summary:</b>	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]