

Product datasheet for **RC238307**

PTGS1 (NM_001271367) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTGS1 (NM_001271367) 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



[View online »](#)

ORF Nucleotide Sequence:

>RC238307 representing NM_001271367
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCATGCGCCTGGTACTCACAGTGGCTCCAACCTTATCCCCAGTCCCCCACCTACAACCTCAGCAC
 ATGACTACATCAGCTGGGAGTCTTCTCCAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCTAA
 AGATTGCCCCACACCCATGGGAACCAAAGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGCCG
 TTCCTGCTCAGGAGGAAGTTCATACCTGACCCCAAGGCACCAACCTCATGTTTGCCTTCTTTCACAAC
 ACTTCACCCACCAGTTCTTCAAACCTTCTGGCAAGATGGGTCCTGGCTTACCAAGGCCCTGGGCCATGG
 GGTAGACCTCGGCCACATTTATGGAGACAATCTGGAGCGTCAGTATCAACTGCGGCTCTTAAAGGATGGG
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 ACTACCCCGAGGCATCCCGCCCAGAGCCAGATGGCTGTGGCCAGGAGGTGTTGGGCTGCTTCTGG
 GCTCATGTGTATGCCACGCTCTGGCTACGTGAGCACAACCGTGTGTGTGACCTGCTGAAGGCTGAGCAC
 CCCACCTGGGGCGATGAGCAGCTTTCCAGACGACCCGCCTCATCCTCATAGGGGAGACCATCAAGATTG
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 GTCTGCCTCAACACCAAGACCTGTCCCTACGTTTCTTCCGTGTGCCGGATGCCAGTCAGGATGATGGG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC238307 representing NM_001271367
 Red=Cloning site Green=Tags(s)

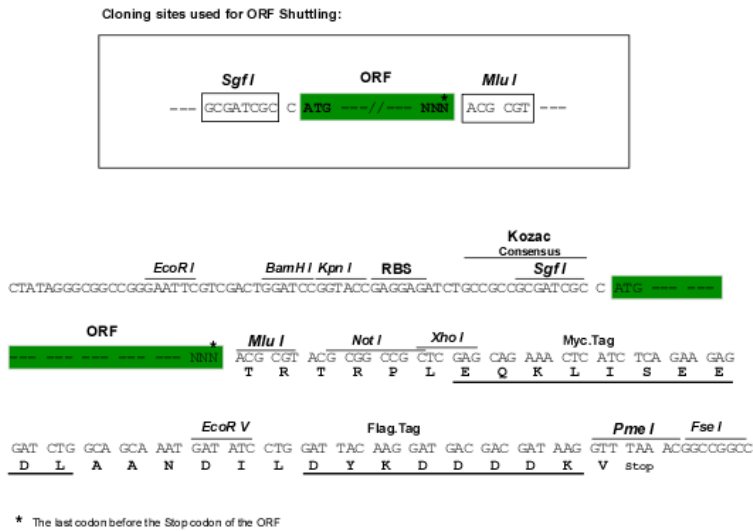
MLMRLVLTVRNLIIPSPPTYNSAHDYISWESFSNVSYYTRILPSVPKDCPTPMGTGKQKLPDAQLLARR
 FLLRRKFIPDPQGTNLMFAFFAQHFTHQFFKTSGKMGPFTKALGHGVDLGHYGDNLERQYQLRFLKDG
 KLKYQVLDGEMYPPEVEEAPVLMHYPRGIPPQSQMAVGQEVFGLLPGLMLYATLWLREHNRVCDLLKAEH
 PTWGDEQLFQTTRLILIGETIKIVIEEYVQQLSGYFLQLKFDPELLFGVQFYRNRRIAMEFNHLYHWHPL
 MPDSFKIGGRNMDHHILHVAVDVIRESMRMLQPFNEYRKRFGMKPYTSFQELVGEKEMAAEELLYGD
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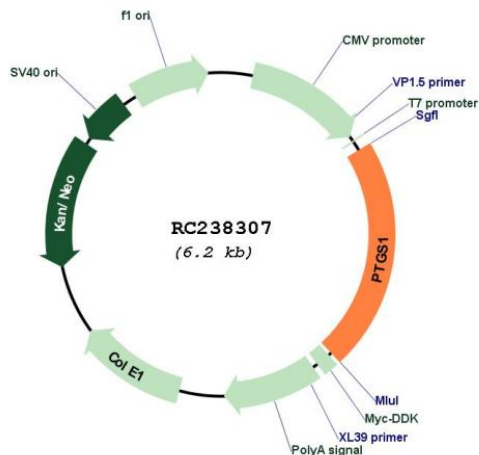
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001271367

ORF Size: 1359 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_001271367.2](#)

RefSeq Size: 4905 bp

RefSeq ORF: 1362 bp

Locus ID: 5742

Cytogenetics: 9q33.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

MW: 52.4 kDa

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]