

Product datasheet for **RG238307**

PTGS1 (NM_001271367) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTGS1 (NM_001271367) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTGS1
Synonyms:	COX1; COX3; PCOX1; PES-1; PGG/HS; PGHS-1; PGHS1; PHS1; PTGHS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238307 representing NM_001271367. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCTCATGCGCCTGGTACTCACAGTGCCTCCAACCTTATCCCCAGTCCCCCACCTACAACCTCAGCA
CATGACTACATCAGCTGGGAGTCTTTCTCCAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCT
AAAGATTGCCCCACCCCATGGGAACCAAGGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGC
CGCTTCTGCTCAGGAGGAAGTTCATACCTGACCCCAAGGCACCAACCTCATGTTTGCCTCTTTGCA
CAACACTTCAACCACAGTCTTCAAAACTTCTGGCAAGATGGGTCTGGCTTACCAAGGCCTTGGGC
CATGGGTAGACCTCGGCCACATTTATGGAGACAATCTGGAGCGTCAGTATCAACTGCGGCTCTTTAAG
GATGGGAAACTCAAGTACCAGGTGCTGGATGGAGAAATGTACCCGCCCTCGGTAGAAGAGGCGCCTGTG
TTGATGCACTACCCCGAGGCATCCCGCCAGAGCCAGATGGCTGTGGGCCAGGAGGTGTTGGGCTG
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GCTGAGCACCCACCTGGGGCGATGAGCAGCTTTCCAGACGACCCGCCCTCATCCTCATAGGGGAGACC
ATCAAGATTGTCATCGAGGAGTACGTGCAGCAGCTGAGTGGCTATTTCTGCAGCTGAAATTTGACCCA
GAGCTGCTGTTCCGGTGTCCAGTCCAATACCGCAACCGCATTGCCATGGAGTTCAACCATCTCTACCAC
TGGCACCCCTCATGCTGACTCCTTCAAGATCGGTGGGGCAGGAACATGGACCACCACATCCTGCAT
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TTTGGCATGAAACCTACACCTCCTTCCAGGAGCTCGTAGGAGAGAAGGAGATGGCAGCAGAGTTGGAG
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TCTATCTTTGGGAGAGTATGATAGAGATTGGGCTCCCTTTTCCCTCAAGGGTCTCCTAGGGAATCCC
ATCTGTTCTCCGGAGTACTGGAAGCCGAGCACATTTGGCGCGAGGTGGGCTTTAACATTGTCAAGACG
GCCACTGAAGAAGCTGGTCTGCCTCAACACCAAGACCTGTCCCTACGTTTCTTCCGTGTGCCGAT
GCCAGTCAGGATGATGGCCTGCTGTGGAGCGACCATCCACAGAGCTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG238307
 Blue=ORF Red=Cloning site Green=Tag(s)

MLMRLVLTVRSNLI P SPPTYNSAHDI SWESFSNVSYTRILPSVPKDCPTMGTKGKKQLPDAQLLAR
 RFLLRKFIPDPQGTNLMAFFAQHFTHQFFKTSKMGPGFTKALGHGVDLGHYGDNLERQYQLRFLK
 DGKLYQVLDGEMYPSPVEEAPVLMHYPRGIPPQSQMAVGQEVFGLLPGLMLYATLWLREHNRVCDLLK
 AEHPTWGDEQLFQTTRLILIGETIKIVIEEYVQQLSGYFLQLKFDPELLFGVQFQYRNRIAMEFNHLYH
 WHPLMPDSFKIGGRNMDHHILHVAVDVIRE SREMRLQPFNEYRKRFGMKPYTSFQELVGEKEMAAELE
 ELYGDIDALEFYGLLLEKCHPNSIFGESMIEIGAPFLKGLLGNPICSPEYWKPSTFGGEVGFNIYKT
 ATLKKLVCLNTKTCPIVVSFRVPDASQDDGPAVERPSTEL
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

RefSeq: [NM_001271367.2](#)

RefSeq Size: 4905 bp

RefSeq ORF: 1362 bp

Locus ID: 5742

Cytogenetics: 9q33.2

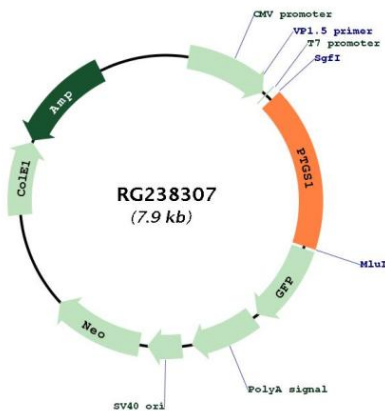
Protein Families: Druggable Genome, Transmembrane

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]

Product images:



Circular map for RG238307