

Product datasheet for **RG234147**

PTGS1 (NM_001271166) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTGS1 (NM_001271166) 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)



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ORF Nucleotide Sequence:

>RG234147 representing NM_001271166
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCATGCGCCTGGTACTCACAGTGGCTCCAACCTTATCCCCAGTCCCCCACCTACAACCTCAGCAC
 ATGACTACATCAGCTGGGAGTCTTTCTCCAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCTAA
 AGATTGCCCCACACCCATGGGAACCAAAGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCCCGC
 TTCCTGCTCAGGAGGAAGTTCATACCTGACCCCAAGGCACCAACCTCATGTTTGCCCTTCTTGCACAAC
 ACTTCACCCACCAGTTCTTCAAACCTTCTGGCAAGATGGGTCCTGGCTTACCAAGGCCCTGGGCCATGG
 GGTAGACCTCGGCCACATTTATGGAGACAATCTGGAGCGTCAGTATCAACTGCGGCTCTTAAGGATGGG
 AAACCAAGTACCAGGTCTGGATGGAGAAATGTACCCGCCCTCGGTAGAAGAGGCGCTGTGTTGATGC
 ACTACCCCGAGGCATCCCGCCCAGAGCCAGATGGCTGTGGCCAGGAGGTGTTGGGCTGCTTCTGG
 GCTCATGTGTATGCCACGCTCTGGCTACGTGAGCACAACCGTGTGTGTGACCTGCTGAAGGCTGAGCAC
 CCCACCTGGGGCGATGAGCAGCTTTCCAGACGACCCGCCTCATCCTCATAGGGGAGACCATCAAGATTG
 TCATCGAGGAGTACGTGCAGCAGCTGAGTGGCTATTTCCCTGCAGCTGAAATTTGACCCAGAGCTGCTGTT
 CGGTGTCCAGTTCCAATACCGCAACCGCATTGCCATGGAGTTCAACCATCTTACCACTGGCACCCCTC
 ATGCTGACTCCTTCAAGATCGGTGGGGCAGGAACATGGACCACCACATCTGCATGTGGCTGTGGATG
 TCATCAGGGAGTCTCGGGAGATGCGGCTGCAGCCCTTCAATGAGTACCGCAAGAGGTTTGGCATGAAACC
 CTACACCTCCTCCAGGAGCTCGTAGGAGAGAAGGAGATGGCAGCAGAGTTGGAGGAATTGTATGGAGAC
 ATTGATGCGTTGGAGTTCTACCCTGGACTGCTTCTTGAAGTGGCATCCAACTCTATCTTTGGGGAGA
 GTATGATAGAGATTGGGGCTCCCTTTCCCTCAAGGGTCTCCTAGGGAATCCCATCTGTTCTCCGGAGTA
 CTGGAAGCCGAGCACATTTGGCGCGAGGTGGGCTTTAACATTGTCAAGACGCGCCACACTGAAGAAGCTG
 GTCTGCCTCAACACCAAGACCTGTCCCTACGTTTCTTCCGTGTGCCGGATGCCAGTCAGGATGATGGG
 CTGCTGTGGAGCGACCATCCACAGAGCTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG234147 representing NM_001271166
 Red=Cloning site Green=Tags(s)

MLMRLVLTVRSNLIIPSPPTYNSAHDYISWESFSNVSYTRILPSVPKDCPTPMGTGKKQLPDAQLLARR
 FLLRRKFIPDPQGTNLMFAFFAQHFTHQFFKTSKMGPGFTKALGHGVDLGHYGDNLERQYQLRFLKDG
 KLKYQVLDGEMYPPSVEEAPVLMHYPRGIPPQSQMAVGQEVFGLLPGLMLYATLWLREHNRVCDLLKAEH
 PTWGDEQLFQTTRLILIGETIKIVIEEYVQQLSGYFLQLKFDPELLFGVQFYRNRRIAMEFNHLYHWHPL
 MPDSFKIGGGRNMDHHILHVAVDVIRESREMRLQPFNEYRKRFGMKPYTSFQELVGEKEMAAEELLYGD
 IDALEFYPLLLLEKHPNSIFGESMIEIGAPFLKGLLGNPICSPYWKPSTFGGEVGFNIYKTATLKKL
 VCLNKTCTPYVSFRVPDASQDDGPAVERPSTEL

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001271166

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_001271166.2](#)

RefSeq Size: 5160 bp

RefSeq ORF: 1362 bp

Locus ID: 5742

UniProt ID: [P23219](#)

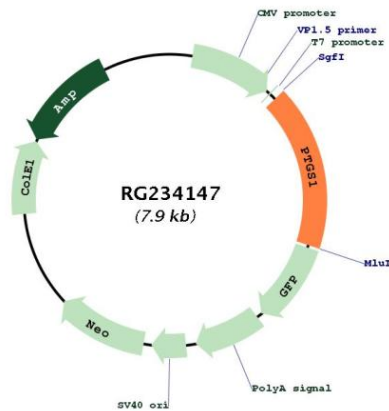
Cytogenetics: 9q33.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: 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]

Product images:



Circular map for RG234147