

Product datasheet for **RG238863**

PTGS1 (NM_001271164) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTGS1 (NM_001271164) 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:

>RG238863 representing NM_001271164.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGAGCCGGAGTCTTTGCTCTGGTCTTGTGTTCTCTGCTCCTGCTCCCGCCGCTCCCCGTCTGCTC
GCGGACCCAGGGCGCCACGCCAGTGAATCCCTGTTGTTACTATCCATGCCAGCACCAGGGCATCTGT
GTCCGCTTCGGCCTTGACCGCTACCAAGTGTGACTGCACCCGCACGGGCTATTCCGGCCCCAACTGCACC
ATCCCTGGCCTGTGGACCTGGCTCCGGAATCACTGCGGCCAGCCCTCTTTACCCCACTTCTGCTC
ACTCACGGGCGCTGGTTCTGGGAGTTTGTCAATGCCACCTTATCCGAGAGATGCTCATGCGCCTGGTA
CTCACAGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGCGCTTCTGCTCAGGAGGAAGTTC
ATACCTGACCCCCAAGGCACCAACCTCATGTTTGCCTTCTTGCACAACACTTACCCACCAGTTCTTC
AAAATCTTGCAAGATGGTCTGGCTTACCAAGGCCTTGGCCATGGGGTAGACCTCGGCCACATT
TATGGAGACAATCTGGAGCGTCAGTATCAACTGCGGCTCTTAAGGATGGGAACTCAAGTACCAGGTG
CTGGATGGAGAAATGTACCCGCCCTCGGTAGAAGAGGCGCTGTGTTGATGCACTACCCCGAGGCATC
CCGCCCAAGCCAGATGGCTGTGGGCCAGGAGGTGTTGGGCTGCTTCTGGGCTCATGCTGTATGCC
ACGCTCTGGCTACGTGAGCACAACCGTGTGTGACCTGCTGAAGGCTGAGCACCCACCTGGGGCGAT
GAGCAGCTTTTCCAGACGACCCGCTCATCCTCATAGGGGAGACCATCAAGATTGTCATCGAGGAGTAC
GTGACGAGCTGAGTGGCTATTTCTGCAGCTGAAATTTGACCCAGAGCTGCTGTTCCGGTGTCCAGTTC
CAATACCGCAACCGCATTGCCATGGAGTTCAACCATCTTACCCTGGCACCCCTCATGCTGACTCC
TTCAAGTGGGCTCCCAGGAGTACAGCTACGAGCAGTTCTTGTCAACACCTCCATGTTGGTGGACTAT
GGGTTGAGGCCCTGGTGGATGCCTTCTCTGCCAGATTGCTGGCCGGATCGGTGGGGCAGGAACATG
GACCACCATCCTGCATGTGGCTGGATGTCATCAGGAGTCTCGGAGATGCGGCTGCAGCCCTTC
AATGAGTACCGCAAGAGGTTTGGCATGAAACCCTACACCTCCTTCCAGGAGCTCGTAGGAGAGAAGGAG
ATGGCAGCAGAGTTGGAGGAATTGATGGAGACATTGATGCGTTGGAGTTCTACCCTGGACTGCTTCTT
GAAAAGTGCCATCCAACTCTATCTTTGGGAGAGTATGATAGAGATTGGGGCTCCCTTTTCCCTCAAG
GGTCTCTAGGGAATCCCATCTGTTCTCCGGAGTACTGGAAGCCGAGCACATTTGGCGCGAGGTGGGC
TTTAACATTGTCAAGACGGCCACACTGAAGAAGCTGGTCTGCCTCAACACCAAGACTGTCCCTACGTT
TCCTTCCGTGTCGGATGCCAGTCAGGATGATGGCCTGCTGTGGAGCGACCATCCACAGAGCTC
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
  
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Protein Sequence:

>Peptide sequence encoded by RG238863
 Blue=ORF Red=Cloning site Green=Tag(s)

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MSRLLLLWFLFLLLLPLVLLADPGAPTPVNPCCYPCQHQICVRFGLDRYQDCDTRTGYSNPCT
IPGLWTWLRNSLRSPSFTHFLLTHGRWFWEFVNATFIREMLMRLVLTGKKQLPDAQLLARRFLRRKF
IPDPQGTNLMFAFFAQHFTHQFKTSGKMGPGFTKALGHGVDLGHYGDNLERQYQLRFLKDGKLYQV
LDGEMYPPSVVEEAPVLMHYPRGIPPQSQMAVGQEVFGLLPGLMLYATLWLRHNRVCDLLKAEHPTWGD
EQLFQTTTRLILIGETIKIVIEEYVQQLSGYFLQLKFDPELLFGVQFQYRNRIAMEFNHLYHWHPLMPDS
FKVGSQEYSYEQFLFNTSMLVDYGEALVDAFSRQIAGRIGGGRNMDHHILHVAVDIVRESREMLQPF
NEYRKRFGMKPYTSFQELVGEKEMAAEELYGDIDALEFYPLLEKCHPNISIFGESMIEIGAPFSLK
GLLGNPICSPYWKPFSTFGGEVGFNIVKATLKKLVCLNTKTCYVVSFRVPDASQDDGPAVERPSTEL
TRTRPLEMESDESGLPAMEIECRITGLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEL
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFLSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
  
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Restriction Sites:

Sgfl-MluI

ACCN:	NM_001271164
ORF Size:	1653 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_001271164.2
RefSeq Size:	4901 bp
RefSeq ORF:	1656 bp
Locus ID:	5742
Cytogenetics:	9q33.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Arachidonic acid metabolism, Metabolic pathways
MW:	63.7 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]