

Product datasheet for **RC234380**

PTGS1 (NM_001271368) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTGS1 (NM_001271368) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTGS1
Synonyms:	COX1; COX3; PCOX1; PES-1; PGG/HS; PGHS-1; PGHS1; PHS1; PTGHS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC234380 representing NM_001271368
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGAAACCGAGGCTCATGAATCCCTGTTGTTACTATCCATGCCAGCACCAGGGCATCTGTGTCCGCT
 TCGGCCTTGACCGCTACCAGTGTGACTGCACCCGCACGGGCTATTCGGGCCCAACTGCACCATCCCTGG
 CCTGTGGACCTGGCTCCGGAATCACTGCGGCCACGCCCTCTTTACCCACTTCTGCTCACTCACGGG
 CGCTGGTCTGGGAGTTGTCAATGCCACCTTCATCCGAGAGATGCTCATGCGCCTGGTACTCACAGTGC
 GCTCCAACCTTATCCCCAGTCCCCCACCTACAACCTCAGCACATGACTACATCAGCTGGGAGTCTTTCTC
 CAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCTAAAGATTGCCCCACACCCATGGGAACAAA
 GGGAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGCCGCTTCTGCTCAGGAGGAAGTTCATACCTG
 ACCCCCAAGGCACCAACCTCATGTTTGCCTTCTTGCACAACACTTCACCCACCAGTTCTTCAAACCTTC
 TGGCAAGATGGGTCTGGCTTACCAAGGCCTTGGCCATGGGGTAGACCTCGGCCACATTTATGGAGAC
 AATCTGGAGCGTCAGTATCAACTGCGGCTCTTAAAGGATGGGAACTCAAGTACCAGGTGCTGGATGGAG
 AAATGTACCCGCCCTCGGTAGAAGAGGCGCCTGTGTTGATGCACTACCCCGAGGCATCCCGCCACAGG
 CCAGATGGCTGTGGGCCAGGAGGTGTTGGGCTGCTTCTGGGCTCATGCTGTATGCCACGCTCTGGCTA
 CGTGAGCACAACCGTGTGTGACCTGTGAAGGCTGAGACCCACCTGGGGCGATGAGCAGCTTTTCC
 AGACGACCCGCCCTCATCTCATAGGGGAGACCATCAAGATTGTATCGAGGAGTACGTGCAGCAGCTGAG
 TGGCTATTTCTCGAGCTGAAATTTGACCCAGAGCTGCTGTTCCGTGTCCAGTCCAATACCGCAACCCG
 ATTGCCATGGAGTTCAACCATCTCTACCACTGGCACCCCTCATGCCTGACTCCTTCAAGATCGTGGGG
 GCAGGAACATGGACCACACCTCTGCATGTGGCTGTGGATGTCATCAGGGAGTCTCGGGAGATCGGGG
 GCAGCCCTTCAATGAGTACCGCAAGAGGTTTGGCATGAAACCCTACACCTCCTTCCAGGAGCTCGTAGGA
 GAGAAGGAGATGGCAGCAGAGTTGGAGGAATTGTATGGAGACATTGATGCGTTGGAGTTCTACCCTGGAC
 TGCTTCTTGAAGAGTCCATCCAACTCTATCTTTGGGGAGAGTATGATAGAGATTGGGGCTCCCTTTTC
 CCTCAAGGGTCTCCTAGGGAATCCCATCTGTTCTCCGGAGTACTGGAAGCCGAGCACATTTGGCGGCGAG
 GTGGGCTTAAACATTGTCAAGACGGCCACACTGAAGAAGCTGGTCTGCCTCAACACCAAGACCTGTCCCT
 ACGTTTCTTCCGTGTGCCGGATGCCAGTCAGGATGATGGGCTGCTGTGGAGCGACCATCCACAGAGCT
 C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC234380 representing NM_001271368
 Red=Cloning site Green=Tags(s)

MRKPRLMNPCCYYPCQHQICVRFGLDRYQCDCTRTGYS GPNCTIPGLWTWLRNSLRPSPSFTHFLLTHG
 RWFWEFVNATFIREMLMRLVLTVRNLIPSPPTYNSAHDYISWESFSNVSYTRILPSVPKDCPTPMGTK
 GKKQLPDAQLLARRFLLRRKFIPDPQGTNLMFAFFAQHFTHQFFKTSGKMGPGFTKALGHGVDLGHYGD
 NLERQYQLRFLKDGKLYQVLDGEMYPVVEEAPVLMHYPRGIPPQSQMAVGQEVFGLLPGLMLYATLWL
 REHNRVCDLLKAEHPTWGDEQLFQTTRLILIGETIKIVIEEYVQQLSGYFLQLKFDPELLFGVQFYRNR
 IAMEFNHLYHWHPLMPDSFKIGGGRNMDHHLHVAVDVIRESREMRLQPFNEYRKRFGMKPYTSFQELVG
 EKEMAAELEEELYGDIDALEFYPLLLKCHPNISIFGESMIEIGAPFSLKGLLGNPICSPEYWKPFSTFGGE
 VGFNIVKTATLKKLVCLNTKCPYVSFRVPDASQDDGPAVERPSTEL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001271368

ORF Size: 1611 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_001271368.2](#)

RefSeq Size: 5382 bp

RefSeq ORF: 1614 bp

Locus ID: 5742

UniProt ID: [P23219](#)

Cytogenetics: 9q33.2

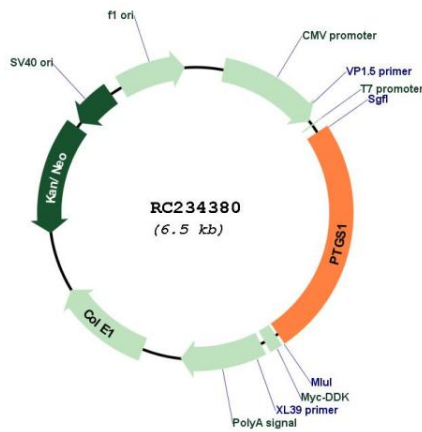
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

MW: 62.4 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 RC234380