

Product datasheet for **RG206436**

PTGS1 (NM_000962) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | PTGS1 (NM_000962) 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:

>RG206436 representing NM_000962
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCCGGAGTCTCTTGTCTCCGGTTCTTGTCTTCTGTCTCTGCTCCCGCCGCTCCCCGTCTGTCTCG
 CGGACCCAGGGGCGCCACGCCAGTGAATCCCTGTTGTTACTATCCATGCCAGCACCAGGCATCTGTGT
 CCGCTTCGGCCTTGACCGCTACCACTGTGACTGCACCCGCACGGGCTATTCGGGCCCAACTGCACCATC
 CCTGGCCTGTGGACCTGGCTCCGGAATTCAGTGCAGCCAGCCCTCTTTCACCCACTTCTGTCTACTC
 ACGGGCGTGGTCTGGGAGTTTGTCAATGCCACCTTCATCCGAGAGATGCTCATGCGCCTGGTACTCAC
 AGTGGCTCCAACCTTATCCCCAGTCCCCCACCTACAACCTCAGCACATGACTACATCAGCTGGGAGTCT
 TTCTCAAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCTAAAGATTGCCCCACACCCATGGGAA
 CCAAAGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGCCGCTTCTGTCTCAGGAGGAAGTTCAT
 ACCTGACCCCAAGGCACCAACCTCATGTTTGCCTTCTTTCACACAACACTTCACCCACCAGTTCTTCAA
 ACTTCTGCAAGATGGGTCTGGCTTACCAAGGCCTTGGGCCATGGGGTAGACCTCGGCCACATTTATG
 GAGACAATCTGGAGCGTCAATCAACTGCGGCTCTTAAAGGATGGGAACTCAAGTACCAGGTGCTGGA
 TGGAGAAATGTACCCGCCCTCGGTAGAAGAGGCGCCTGTGTTGATGCACTACCCCGAGGCATCCCGCC
 CAGAGCCAGATGGCTGTGGGCCAGGAGTGTGGGCTGCTTCTGGGCTCATGCTGATGCCACGCTCT
 GGCTACGTGAGCACAACCGTGTGTGTGACTGCTGAAGGCTGAGCACCCACCTGGGGCGATGAGCAGCT
 TTTCCAGACGACCCGCTCATCCTCATAGGGGAGACCAACAAGATTGTCATCGAGGAGTACGTGCAGCAG
 CTGAGTGGCTATTTCTGCAGCTGAAATTTGACCCAGAGCTGCTGTTCCGTTGCCAGTCCAATACCGCA
 ACCGATTGCCATGGAGTCAACCATCTCTACCCTGGCACCCCTCATGCCTGACTCCTTCAAGGTGGG
 CTCCCAGGAGTACAGCTACGAGCAGTCTTGTTCACACCTCCATGTTGGTGGACTATGGGGTTGAGGCC
 CTGGTGGATGCCTTCTCTCGCCAGATTGCTGGCCGGATCGGTGGGGCAGGAACATGGACCACCACATCC
 TGCATGTGGCTGTGGATGTCATCAGGGAGTCTCGGGAGATGCGGCTGCAGCCCTTCAATGAGTACCGCAA
 GAGGTTTGGCATGAAACCCTACACCTCCTTCCAGGAGCTCGTAGGAGAGAAGGAGATGCCAGCAGAGTTG
 GAGGAATTGATGGAGACATTGATGCGTTGGAGTTCTACCCTGGACTGCTTCTTGAAGAGTCCATCCAA
 ACTCTATCTTTGGGAGAGTATGATAGAGATTGGGGCTCCCTTTCCCTCAAGGGTCTCCTAGGGAATCC
 CATCTGTTCTCCGGAGTACTGAAAGCCGAGCACATTTGGCGCGAGGTGGGCTTAAACATTGTCAAGACG
 GCCACACTGAAGAAGCTGGTCTGCCTCAACACCAAGACCTGTCCCTACGTTTCTTCCGTGTCCCGGATG
 CCAGTCAGGATGATGGGCTGCTGTGGAGCGACCATCCACAGAGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG206436 representing NM_000962
 Red=Cloning site Green=Tags(s)

MSRSLLLRFLFLLLLPLPVLLADPGAPTPVNPCCYPCQHQGICVRFGLDRYQCDCTRTGYSNPNTI
 PGLWTWLRNSLRPSFSFTHFLLTHGRWFVFNATFIREMLMRLVLTVRSNLIPSPPTYNSAHDYISWES
 FSNVSYTRILPSVPKDCPTPMGTGKQKLPDAQLLARRFLLRRKFIPDPQGTNLMFAFFAQHFTHQFFK
 TSGKMGPGFTKALGHGVDLGHYIGNLERYQLRLFKDGKLYQVLDGEMYPVSVEEAPVLMHYPRGIPP
 QSQMAVQGEVFGLLPGLMLYATLWLREHNRVCDLLKAEHPTWGDEQLFQTTRLILIGETIKIVIEEYVQQ
 LSGYFLQLKFDPELLFGVQFYRNRIAMEFNHL YHWHPLMPDSFKVGSQEYSYEQFLFNTSMLVDYGV
 EALVDAFSRQIAGRIGGGRNMDHHLHVAVDVIRESREMRLQPFNEYRKRFGMKPYTSFQELVGEKEMAE
 EELYGDIDALEFYPLLLEKCHPNISIFGESMIEIGAPFSLKGLLGNPICSPEYWKPFSTFGGEVGFNIVKT
 ATLKLLVCLNTKTCYVSRVFPDASQDDGPAVERPSTEL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_000962

ORF Size: 1797 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_000962.1](#)

RefSeq Size: 5093 bp

RefSeq ORF: 1800 bp

Locus ID: 5742

UniProt ID: [P23219](#)

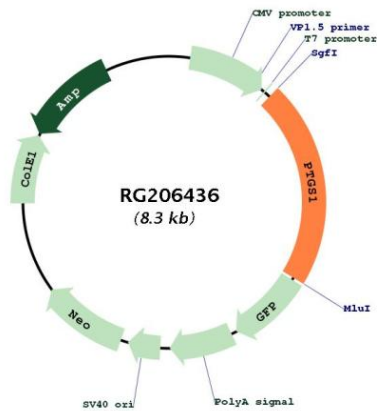
Cytogenetics: 9q33.2

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 RG206436