

Product datasheet for **RC206436**

PTGS1 (NM_000962) Human Tagged ORF Clone

Product data:

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

>RC206436 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCCGGAGTCTCTTGTCTCCGGTTCTTGTCTTCTGTCTCTGCTCCCGCCGCTCCCCGTCTGTCTCG
 CGGACCCAGGGGCGCCACGCCAGTGAATCCCTGTTGTTACTATCCATGCCAGCACCAGGGCATCTGTGT
 CCGCTTCGGCCTTGACCGCTACCACTGTGACTGCACCCGCACGGGCTATTCGGGCCCAACTGCACCATC
 CCTGGCCTGTGGACCTGGCTCCGGAATTCAGTGCAGCCAGCCCTCTTTCACCCACTTCTGTCTACTC
 ACGGGCGTGGTCTGGGAGTTTGTCAATGCCACCTTCATCCGAGAGATGCTCATGCGCCTGGTACTCAC
 AGTGGCTCCAACCTTATCCCCAGTCCCCCACCTACAACCTCAGCACATGACTACATCAGCTGGGAGTCT
 TTCTCCAACGTGAGCTATTACACTCGTATTCTGCCCTCTGTGCCTAAAGATTGCCCCACACCCATGGGAA
 CCAAAGGGAAGAAGCAGTTGCCAGATGCCAGCTCCTGGCCCGCCGCTTCTGTCTCAGGAGGAAGTTCAT
 ACCTGACCCCAAGGCACCAACCTCATGTTTGCCTTCTTTCACACAACACTTCACCCACCAGTTCTTCAA
 ACTTCTGCAAGATGGGTCTGGCTTACCAAGGCCTTGGGCCATGGGGTAGACCTCGGCCACATTTATG
 GAGACAATCTGGAGCGTCACTATCAACTGCGGCTCTTAAAGGATGGGAAACTCAAGTACCAGGTGCTGGA
 TGGAGAAATGTACCCGCCCTCGGTAGAAGAGGCGCCTGTGTTGATGCACTACCCCGAGGCATCCCGCC
 CAGAGCCAGATGGCTGTGGGCCAGGAGGTGTTGGGCTGCTTCTGGGCTCATGCTGTATGCCACGCTCT
 GGCTACGTGAGCACAACCGTGTGTGTGACTGCTGAAGGCTGAGCACCCACCTGGGGCGATGAGCAGCT
 TTTCCAGACGACCCGCTCATCTCATAGGGGAGACCAACAAGATTGTCATCGAGGAGTACGTGCAGCAG
 CTGAGTGGCTATTTCTGCAGCTGAAATTTGACCCAGAGCTGCTGTTCCGGTGTCCAGTCCAATACCGCA
 ACCGCATTGCCATGGAGTCAACCATCTCTACCCTGGCACCCCTCATGCCTGACTCTTCAAGTGGGG
 CTCCCAGGAGTACAGCTACGAGCAGTCTTGTGTTCAACACCTCCATGTTGGTGGACTATGGGGTTGAGGCC
 CTGGTGGATGCCTTCTCTCGCCAGATTGCTGGCCGGATCGGTGGGGCAGGAACATGGACCACCACATCC
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 GAGGTTTGGCATGAAACCCTACACCTCCTTCCAGGAGCTCGTAGGAGAGAAGGAGATGCCAGCAGAGTTG
 GAGGAATTGTATGGAGACATTGATGCGTTGGAGTTCTACCCTGGACTGCTTCTTGAAGAGTCCATCCAA
 ACTCTATCTTTGGGAGAGTATGATAGAGATTGGGGCTCCCTTTTCCCTCAAGGGTCTCCTAGGGAATCC
 CATCTGTTCTCCGGAGTACTGAAAGCCGAGCACATTTGGCGCGAGGTGGGCTTTAACATTGTCAAGACG
 GCCACACTGAAGAAGCTGGTCTGCCTCAACACCAAGACCTGTCCCTACGTTTCTTCCGTGTGCCGGATG
 CCAGTCAGGATGATGGGCTGCTGTGGAGCGACCATCCACAGAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206436 protein sequence
 Red=Cloning site Green=Tags(s)

MSRSLLLRFLFLLLLPLPVLLADPGAPTPVNPCCYYPQHQGICVRFGLDRYQCDCRTTGYSNPNTI
 PGLWTWLRNSLRSPSFTHFLLTHGRWFVFNATFIREMLMRLVLTVRSNLIPSPPTYNSAHDYISWES
 FSNVSYTRILPSVPKDCPTPMGTGKKQLPDAQLLARRFLRRKFIPDPQGTNLMFAFFAQHFTHQFFK
 TSGKMGPGFTKALGHGVDLGHYGDNLERQYQLRLFKDGKLYQVLDGEMYPVSVEEAPVLMHYPRGIPP
 QSQMAVQQEVFGLLPGLMLYATLWLREHNRVCDLLKAEHPTWDEQLFQTTRLILIGETIKIVIEEYVQQ
 LSGYFLQLKFDPELLFGVQFYRNRIAMEFNHL YHWHPLMPDSFKVGSQEYSYEQFLFNTSMLVDYGV
 EALVDAFSRQIAGRIGGGRNMDHHLHVAVDVIRESREMLQPFNEYRKRFGMKPYTSFQELVGEKEMAE
 EELYGDIDALEFYPLLLLEKCHPNISIFGESMIEIGAPFLKGLLGNPICSPEYWKPSTFGGEVGFNIVK
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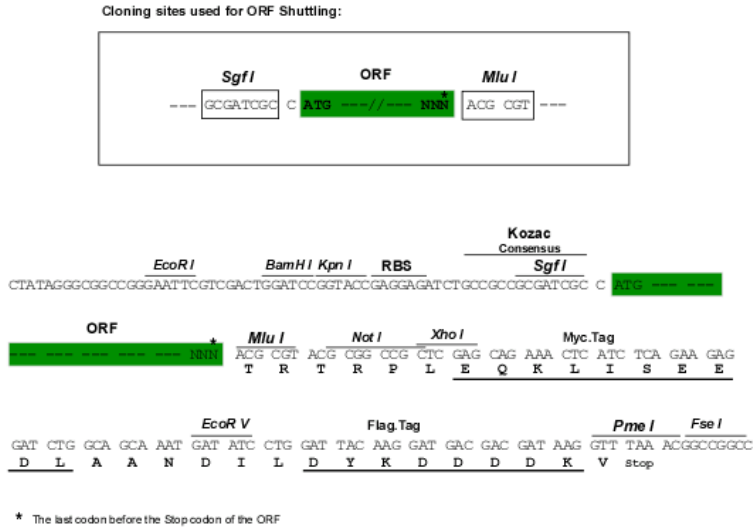
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6018_c12.zip

Restriction Sites: SgfI-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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000962.1](#)

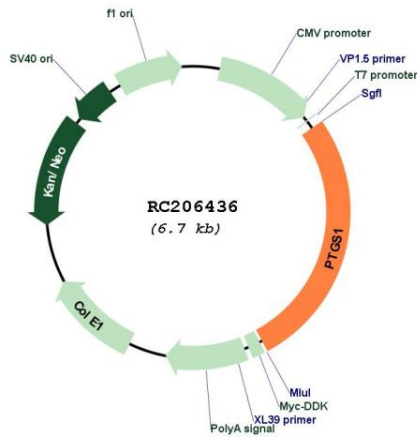
RefSeq Size: 5045 bp

RefSeq ORF: 1800 bp

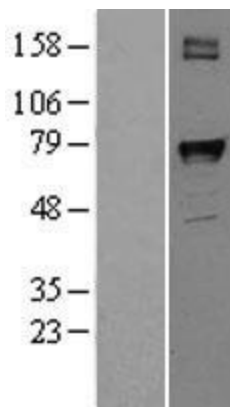
Locus ID: 5742
UniProt ID: [P23219](#)
Cytogenetics: 9q33.2
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Arachidonic acid metabolism, Metabolic pathways
MW: 68.7 kDa

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]

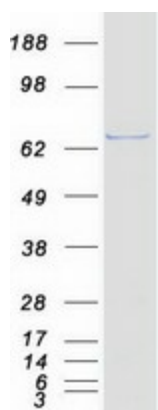
Product images:



Circular map for RC206436



Western blot validation of overexpression lysate (Cat# [LY400348]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206436 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTGS1 protein (Cat# [TP306436]). The protein was produced from HEK293T cells transfected with PTGS1 cDNA clone (Cat# RC206436) using MegaTran 2.0 (Cat# [TT210002]).