

## Product datasheet for **MR227684**

### **Ptgs2 (NM\_011198) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ptgs2 (NM_011198) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ptgs2
Synonyms:	COX; Cox-; Cox-2; COX2; gripghs; PES-2; Pgh; PGHS; PGHS-2; Pghs2; PHS; PHS-2; PHS II; Tis; TIS10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR227684 representing NM\_011198  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTCTTCCGAGCTGTGCTGCTCTGCGCTGCCCTGGGGCTCAGCCAGGCAGAAATCCTTGCTGTGCCA  
 ATCCATGTCAAAACCGTGGGGAATGTATGAGCACAGGATTTGACCAGTATAAGTGTGACTGTACCCGGAC  
 TGGATTCTATGGTGAAAACGTACTACACTGAATTTCTGACAAGAATCAAATTACTGCTGAAGCCACC  
 CCAAACACAGTGCCTACATCCTGACCCACTTCAAGGGAGTCTGGAACATTGTGAACAACATCCCCTTCC  
 TGCGAAGTTAATCATGAAATATGTGCTGACATCCAGATCATATTTGATTGACAGTCCACCTACTTACAA  
 TGTGCACTATGGTTACAAAAGCTGGGAAGCCTTCCAACCTCTCCTACTACACCAGGGCCCTTCTCC  
 GTAGCAGATGACTGCCAACTCCATGGGTGTGAAGGAAATAAGGAGCTTCTGATTCAAAGAAGTGC  
 TGGAAAAGTTCTTCTACGGAGAGATTTCACCTGACCCCAAGGCTCAAATATGATGTTTGCATTCTT  
 TGCCAGCACTTACCCATCAGTTTTTCAAGACAGATCATAAGCGAGGACCTGGGTTACCCGAGGACTG  
 GGCCATGGAGTGGACTTAAATCACATTTATGGTAAAACCTCTGGACAGACAACATAAACTGCGCCTTTTCA  
 AGGATGGAATAATTGAAATATCAGGTCATTGGTGGAGAGGTGTATCCCCCACAGTCAAAGACACTCAGGT  
 AGAGATGATCTACCCTCCTCACATCCCTGAGAACCTGCAGTTTGTGTGGGGCAGGAAGTCTTGGTCTG  
 GTGCTGGTCTGATGATGTATGCCACCATCTGGCTTCGGGAGCACAACAGAGTGTGCGACATACTCAAGC  
 AGGAGCATCCTGAGTGGGGTGTAGCAACTATCCAAACCAGCAGACTCATACTCATAGGAGAGACTAT  
 CAAGATAGTATCGAAGACTACGTGCAACACCTGAGCGGTTACCACTTCAAACCTCAAGTTGACCCAGAG  
 CTCCTTTTCAACCAGCAGTTCAGTATCAGAACCAGGATTGCTCTGAATCAACACACTCTACTGCTGGC  
 ACCCCGTGCTGCCGACACCTTCAACATGAAGACCAGGAGTACAGCTTCAAACAGTTTCTTACAACAA  
 CTTCCATCCTCTGGAACATGGACTCACTCAGTTTGTGAGTCACTCACCAGACAGATTGCTGGCCGGGTT  
 GCTGGGGGAAGAATGTGCAATTGCTGTACAAGCAGTGGCAAAGGCCTCCATTGACCAGAGCAGAGAGA  
 TGAAATACCAGTCTCTCAATGAGTACCGCAAACGCTTCTCCCTGAAGCCGTACACATCATTTGAAGAACT  
 TACAGGAGAGAAGGAAATGGCTGCAGAATTGAAAGCCCTTACAGTGACATCGATGTCATGGAACGTAC  
 CCTGCCCTGCTGGTGGAAAAACCTCGTCCAGATGCTATCTTTGGGGAGACCATGGTAGAGCTTGGAGCAC  
 CATTCTCCTTGAAGGACTTATGGGAAATCCCATCTGTTCTCCTCAACTGGAAGCCGAGCACCTTTGG  
 AGGCGAAGTGGGTTTTAAGATCATCAATACTGCCTCAATTCAGTCTCTCATCTGCAATAATGTGAAGGGG  
 TGTCCTTCACTTCTTCAATGTGAAGATCCACAGCCTACAAAACAGCCACCATCAATGCAAGTGCCT  
 CCCACTCCAGACTAGATGACATTAACCCTACAGTACTAATCAAAGGCGTTCAACTGAGCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR227684 representing NM\_011198  
 Red=Cloning site Green=Tags(s)

MLFRAVLLCAALGLSQAANPCSNPCQNRGECMSTGFDQYKDCDTRTGFYGENCTTPEFLTRIKLLKPT  
 PNTVHYILTHFKGVWNI VNNIPFLRSLIMKYVLT SRSYLIDSPPTYNVHYGYKSWEAFSNLSYYTRALPP  
 VADDCPTPMGVKGNKELPDSKEVLEKVLRRFIPDPQGSNMMFAFFAQHFTHQFFKTDHKRGPGRGL  
 GHGVLDNHIYGETLDRQHKLR LFKDGKLYQVIGGEVYPPVTKDQVEM IYPPHIPENLQF AVGQEVFGL  
 VPGLMMYATIWLREHNRVCDILKQEHPEWGEQLFQTSRLILIGETIKIVIEDYVQHL SGYHFKLKFDE  
 LLFNQQFQYQNR IASEFNLYHWHPLLPDTFNIEDQEYSFKQFLYNN SILLHGLTQFVESFTRQIAGR  
 VAGGRNVP IAVQAVAKASIDQSREMKYQSLNEYRKRFS LKPYTSFEELTGEKEMAAELKALYSDIDVME  
 LYPALLVEKPRPDAIFGETMVELGAPFSLKGLMGNPICSPQYWKPSTFGGEVGFKIINTASIQSLICNNVKG  
 CPFTSFNVQDPQPTKTATINASASHSRLLDDINPTVLIKRRSTEL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja1739\\_b06.zip](https://cdn.origene.com/chromatograms/ja1739_b06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_011198

**ORF Size:** 1812 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_011198.4](#)

**RefSeq Size:** 4150 bp

**RefSeq ORF:** 1815 bp

**Locus ID:** 19225

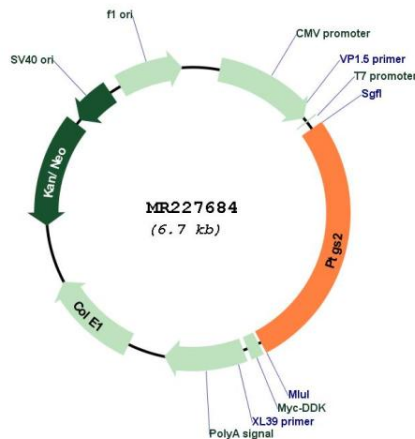
**UniProt ID:** [Q05769](#)

**Cytogenetics:** 1 63.84 cM

**MW:** 69.5 kDa

**Gene Summary:** This gene encodes an enzyme that is a member of the prostaglandin G/H synthase family. The encoded protein converts arachidonic acid to prostaglandin endoperoxide H<sub>2</sub> which is a key enzymatic step in prostaglandin biosynthesis. This gene is the inducible prostaglandin G/H synthase family member that is upregulated during inflammation. Aberrant regulation of this gene is associated with cancer progression in several tissues and an increased risk of cardiovascular events. This gene is the target of many non-steroidal anti-inflammatory drugs. [provided by RefSeq, Sep 2015]

### Product images:



Circular map for MR227684