

Product datasheet for **MG227684**

Ptgs2 (NM_011198) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Ptgs2 (NM_011198) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| 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-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>MG227684 representing NM_011198
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTCTTCCGAGCTGTGCTGCTCTGCGCTGCCCTGGGGCTCAGCCAGGCAGCAAATCCTTGCTGTGCCA
 ATCCATGTCAAAACCGTGGGGAATGTATGAGCACAGGATTTGACCAGTATAAGTGTGACTGTACCCGGAC
 TGGATTCTATGGTGAAAACGTACTACACTGAATTTCTGACAAGAATCAAATTACTGCTGAAGCCACC
 CCAAACACAGTGCCTACATCCTGACCCACTTCAAGGGAGTCTGGAACATTGTGAACAACATCCCCTTCC
 TGCGAAGTTAATCATGAAATATGTGCTGACATCCAGATCATATTTGATTGACAGTCCACCTACTTACAA
 TGTGCACTATGGTTACAAAAGCTGGGAAGCCTTCCAACCTCTCTACTACACCAGGGCCCTTCTCTCC
 GTAGCAGATGACTGCCAACTCCATGGGTGTGAAGGAAATAAGGAGCTTCTGATTCAAAGAAGTGC
 TGGAAAAGTTCTTCTACGGAGAGATTTCACCTGACCCCAAGGCTCAAATATGATGTTTGCATTCTT
 TGCCAGCACTTACCCATCAGTTTTTCAAGACAGATCATAAGCGAGGACCTGGGTTACCCGAGGACTG
 GGCCATGGAGTGGACTTAAATCACATTTATGGTAAAACCTGGACAGACAACATAAACTGCGCCTTTTCA
 AGGATGGAAAATTGAAATATCAGGTCATTGGTGGAGAGGTGTATCCCCCACAGTCAAAGACACTCAGGT
 AGAGATGATCTACCCTCCTCACATCCCTGAGAACCTGCAGTTTGTGTGGGGCAGGAAGTCTTGGTCTG
 GTGCTGGTCTGATGATGTATGCCACCATCTGGCTTCGGGAGCACAACAGAGTGTGCGACATACTCAAGC
 AGGAGCATCCTGAGTGGGGTGTAGCAACTATCCAAACCAGCAGACTCATACTCATAGGAGAGACTAT
 CAAGATAGTGATCGAAGACTACGTGCAACACCTGAGCGGTTACCACTTCAAACCTCAAGTTGACCCAGAG
 CTCCTTTTCAACCAGCAGTTCAGTATCAGAACCAGGAGTACAGCTTCAAACAGTTTCTTACAACAA
 ACCCCATGCTGCCGACACCTTCAACATTGAAGACCAGGAGTACAGCTTCAAACAGTTTCTTACAACAA
 CTCCATCCTCCTGGAACATGGACTCACTCAGTTTGTGAGTCATTACCAGACAGATTGCTGGCCGGGTT
 GCTGGGGGAAGAAATGTCCAATTGCTGTACAAGCAGTGGCAAAGGCCTCCATTGACCAGAGCAGAGAGA
 TGAAATACCAGTCTCTCAATGAGTACCGCAAACGCTTCTCCCTGAAGCCGTACACATCATTTGAAGAACT
 TACAGGAGAGAAGGAAATGGCTGCAGAATTGAAAGCCCTTACAGTGACATCGATGTCATGGAACGTAC
 CCTGCCCTGCTGGTGGAAAAACCTCGTCCAGATGCTATCTTTGGGGAGACCATGGTAGAGCTTGGAGCAC
 CATTCTCCTTGAAGGACTTATGGGAAATCCCATCTGTTCTCCTCAACTGGAAGCCGAGCACCTTTGG
 AGGCGAAGTGGGTTTTAAGATCATCAATACTGCCTCAATTCAGTCTCTCATCTGCAATAATGTGAAGGGG
 TGTCCTTCACTTCTTCAATGTGAAGATCCACAGCCTACCAAACAGCCACCATCAATGCAAGTGCCT
 CCCACTCCAGACTAGATGACATTAACCCTACAGTACTAATCAAAGGCGTTCAACTGAGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227684 representing NM_011198
 Red=Cloning site Green=Tags(s)

MLFRAVLLCAALGLSQAANPCCSNPCQNRGECMSTGFDQYKDCDTRTGFYGENCTTPEFLTRIKLLKPT
 PNTVHYILTHFKGVWNIVNNIPFLRSLIMKYVLTSRSYLIDSPPTYNVHYGYSWEAFSNLSYYTRALPP
 VADDPCPTPMGVKGNKELPDSKEVLEKVLRRFIPDPQGSNMMFAFFAQHFTHQFKTDHKRGPGRGL
 GHGVDLNHIYETLDRQHKLRFLKDGKLYQVIGGEVYPPPTVKDTQVEMIYPPHIPENLQFVAVGQEVFGL
 VPGLMMYATIWLREHNRVCDILKQEHPEWGEQLFQTSRLILIGETIKIVIEDYVQHLSGYHFKLKFDE
 LLFNQQFYQNR IASEFNLYHWHPLLPTFNIEDQEYSFKQFLYNNISILLEHGLTQFVESFTRQIAGR
 VAGGRNVP IAVQAVAKASIDQSRMKYQSLNEYRKRFSKPYTSFEELTGEKEMAAELKALYSIDVMELY
 PALLVEKPRPDAIFGETMVELGAPFSLKGLMGNPICSPQYWKPSTFGGEVGFKIINTASIQLICNNVKG
 CPFTSFNVQDPQPTKTATINASASHSRLDDINPTVLIKRRSTEL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-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 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.

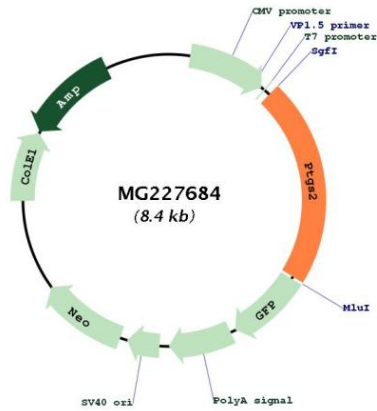
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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

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 H2 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 MG227684