

Product datasheet for **MG224724**

Ptgds (NM_008963) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ptgds (NM_008963) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Ptgds
Synonyms: 21kDa; L-PGDS; PGD2; PGDS; PGDS2; PtgS3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG224724 representing NM_008963
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTGCTCTTCGCATGCTGTGGATGGGTTTGGTCTCTGGGTCTCTGGGATCCCACAGACCCAG
 CCCAGGGCCATGACACAGTGCAGCCCACTTTCAACAAGACAAGTTCTGGGGCGCTGGTACAGCGCGGG
 CCTCGCCTCCAACCTCAAGCTGGTCCGGGAGAAGAAAGCTGTATTGTATATGTGCAAGACAGTGGTAGCC
 CCCTCCACAGAAGCGGCCCTCAATCTCACCTCTACCTTCTCAGGAAAAACCAGTGTGAGACCAAGATCA
 TGGTACTGCAGCCTGCGGGGGCTCCTGGACTACACCTACAGCAGCCCCACTCGGCAGCATCCACTC
 CGTGTCAGTGGTGGAGGCCAACTATGACGAGTACGCTCTGCTATTGAGCAGAGGCCACCAAGGCCAGGC
 CAGGACTTCCGCATGGCCACCCTCTACAGCAGAACCCAGACTCTGAAGGACGAGCTGAAGGAGAAATTCA
 CCACCTTTAGCAAGGCCAGGGCCTCACAGAGGAGGACATTGTTTTCTGCCCAACCGGATAAGTGCAT
 TCAAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224724 representing NM_008963
 Red=Cloning site Green=Tags(s)

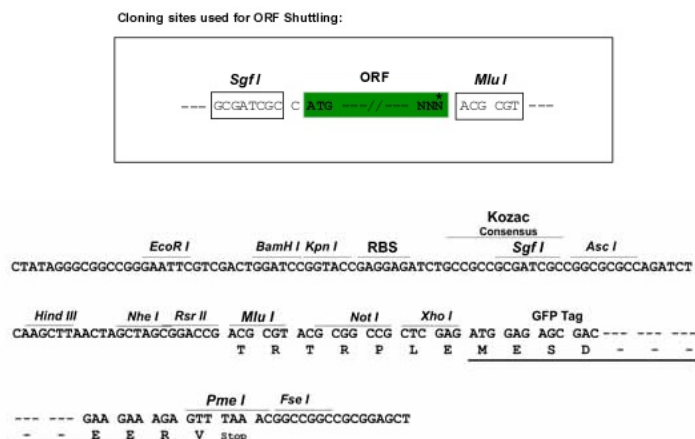
MAALRMLWMGLVLLGLLGFPQTPAQGHDTVQPNFQQDKFLGRWYSAGLASNSSWFREKKAVLYMCKTVVA
 PSTEGGLNLTSTFLRKNQCETKIMVLQPAGAPGHYTYSSPHSGSIHVSVVVEANYDEYALLFSRGTGKPG
 QDFRMTLYSRTQTLKDELKEKFTTFSKAQGLTEEDIVFLPQDPKCIQE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:



ACCN: NM_008963

ORF Size: 567 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_008963.3](#)

RefSeq Size: 806 bp

RefSeq ORF: 570 bp

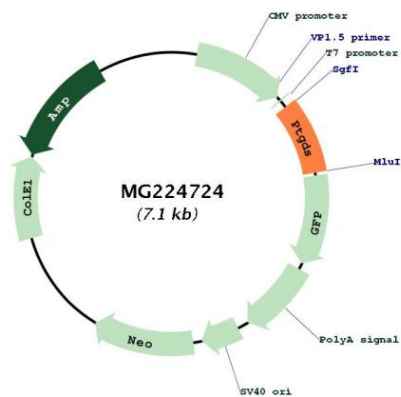
Locus ID: 19215

UniProt ID: [O09114](#)

Cytogenetics: 2 17.28 cM

Gene Summary:

Catalyzes the conversion of PGH2 to PGD2, a prostaglandin involved in smooth muscle contraction/relaxation and a potent inhibitor of platelet aggregation. Involved in a variety of CNS functions, such as sedation, NREM sleep and PGE2-induced allodynia, and may have an anti-apoptotic role in oligodendrocytes. Binds small non-substrate lipophilic molecules, including biliverdin, bilirubin, retinal, retinoic acid and thyroid hormone, and may act as a scavenger for harmful hydrophobic molecules and as a secretory retinoid and thyroid hormone transporter. Possibly involved in development and maintenance of the blood-brain, blood-retina, blood-aqueous humor and blood-testis barrier. It is likely to play important roles in both maturation and maintenance of the central nervous system and male reproductive system.[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG224724