

Product datasheet for MR224724

Ptgds (NM_008963) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ptgds (NM_008963) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ptgds
Synonyms: 21kDa; L-PGDS; PGD2; PGDS; PGDS2; Ptg3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR224724 representing NM_008963
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCTGCTCTTCGCATGCTGTGGATGGGTTTGGTCTCTGGGCTCTTGGGATCCCACAGACCCAG
CCCAGGGCCATGACACAGTGCAGCCCACTTTCAACAAGACAAGTTCCTGGGGCGCTGGTACAGCGCGGG
CCTCGCCTCCAACCTCAAGCTGGTCCGGGAGAAGAAAGCTGTATTGTATATGTGCAAGACAGTGGTAGCC
CCCTCCACAGAAGGCGGCCCTCAATCTCACTCTACCTTCCTCAGGAAAAACCAGTGTGAGACCAAGATCA
TGGTACTGCAGCCTGCGGGGGCTCCTGGACACTACACCTACAGCAGCCCCACTCGGGCAGCATCCACTC
CGTGTCACTGGTGGAGGCCAACTATGACGAGTACGCTCTGCTATTGAGCAGAGGCACCAAGGGCCAGGC
CAGGACTTCCGCATGGCCACCCTCTACAGCAGAACCCAGACTCTGAAGGACGAGCTGAAGGAGAAATTCA
CCACCTTTAGCAAGGCCAGGGCCTCACAGAGGAGGACATTGTTTTCTGCCCAACCGGATAAGTGCAT
TCAAGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR224724 representing NM_008963
Red=Cloning site Green=Tags(s)

MAALRMLWMGLVLLGLLGFPQTPAQGHDTVQPNFQQDKFLGRWYSAGLASNSSWFREKKAVLYMCKTVVA
PSTEGGLNLTSTFLRKNQCETKIMVLQPAGAPGHYTYSSPHSGSIHSVSVVEANYDEYALLFSRGTGKGP
QDFRMTLYSRTQTLKDELKEFTTFSKAQGLTEEDIVFLPQPDKCIQE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

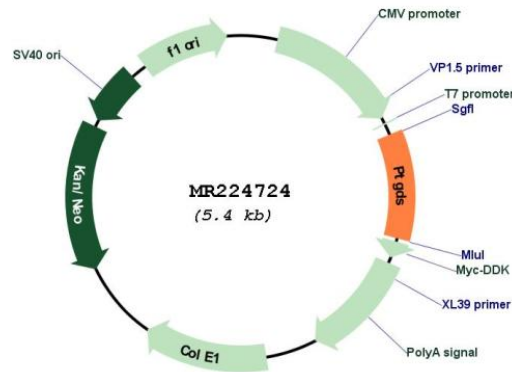


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Cloning Scheme:



Plasmid Map:



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

MW: 21.5 kDa

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]