

## Product datasheet for **MG220403**

### Hpgds (NM\_019455) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Hpgds (NM\_019455) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Hpgds  
**Synonyms:** H-PGDS; Ptgds2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG220403 representing NM\_019455  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCTAACTACAACTGCTTTATTTAATATGAGGGGAAGAGCCGAAATTATTCGCTACATATTCGCTT  
ATTTGGACATAAAGTATGAGGATCACAGAATAGAACAAGCTGACTGGCCTAAAATCAAGCCAACCTTCC  
ATTTGGCAAAATCCCTGTTTTGGAGGTGGAAGGACTTACAATCCACCAGAGCCTCGCAATAGCAAGAT  
TTGACCAAAAACACAGATTTGGCTGGGAAGACAGCGTTGGAGCAATGTCAAGCTGATGCAGTGGTGGACA  
CGCTGGATGACTTCATGTCTCTTCCCATGGGCAGAGAAAGATCAAGATCTAAAAGAGCGGATGTTCAA  
TGAATTGCTCACACATCAAGCACCTCGCCTTCTGAAAGATTTGGACACATACTTAGGAGACAAAGAGTGG  
TTTATAGGCAATTATGTAACCTGGGCAGACTTCTACTGGGATATCTGCAGCACCACACTTTTGGTTTTAA  
AGCCTGGCTTGTGGATATCTACCCAACTGGTGTCAATACGGAACAAAGTCCAAGCTATCCCTGCCAT  
TTCTGCCTGGATACTAAAGAGGCCACAGACAAAACCTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG220403 representing NM\_019455  
Red=Cloning site Green=Tags(s)

MPNYKLLYFNMRGRAEIIIRYIFAYLDIKYEDHRIEQADWPKIKPTLPFGKIPVLEVEGLTIHQSLAIARY  
LTKNTDLAGKTALEQCQADAVVDLDDFMSLFPWAEKDQDLKERMFNELLTHQAPRLKDLDTYLGDKWE  
FIGNYVTWADFYWDICSTLLVLKPGLLDIYPKLVSLRNKVQAIPASAWILKRPQTKL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

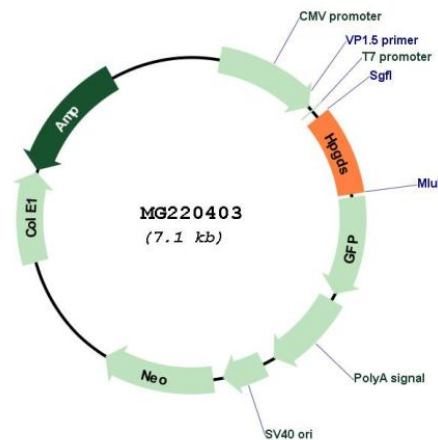


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_019455

ORF Size: 597 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\\_019455.4](#), [NP\\_062328.3](#)

**RefSeq Size:** 3298 bp

**RefSeq ORF:** 600 bp

**Locus ID:** 54486

**UniProt ID:** [Q9JHF7](#)

**Cytogenetics:** 6 C1

**Gene Summary:** Bifunctional enzyme which catalyzes both the conversion of PGH2 to PGD2, a prostaglandin involved in smooth muscle contraction/relaxation and a potent inhibitor of platelet aggregation, and the conjugation of glutathione with a wide range of aryl halides and organic isothiocyanates. Also exhibits low glutathione-peroxidase activity.[UniProtKB/Swiss-Prot Function]