

## Product datasheet for **MG225179**

### Pde5a (NM\_153422) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pde5a (NM_153422) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pde5a
Synonyms:	Cgbpde; Cn5n; Pde5; Pde5a1; PDE5a2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG225179 representing NM\_153422  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAACGAGCGGGCCCCAACTCCGTGCGGTGCGAGCAGCAGCGGGACCCGGACTGGGTGGAAGCGTGGC  
 TGGATGATCACCGGACTTTACCTTCTCTACTTTATTAGAAAGGCCACCAGAGACATGGTCAACGCATG  
 GTTTTCAGAGAGAGTTTCAACATCCCTGTGTGCAAGGAAGGCATCCGAGCCCATACCGAGTCTGCTCT  
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 CTGAATTTGACCGACCTTTAGACCCATTGTTGTCAAGGATTCCGAGGGAACAGTGAGCTTTCTCTCTGA  
 CTCAGGAAAAAGGAACAAATGCCACTAACCCCCCAAGATTTGATAGTGATGAAGGGGACCAGTGCTCA  
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 ATCCGTTTAGAGTGGAACAAAGGCAATGTGGGACATGTGGCAGCTTTTGGCGAGCCCTTGAACATCAAAG  
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 TGCCTTTAAACACGGCACAGTGCATGTTTGTGCTCTGAAAGCCGGCAAGATCCAGAACAAGTTGACGGAT  
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 CAGAAATGGCAGGCCCTCGCGGAGCAGCAGGAGAAGATGCTCCTTAAACGGGGAGAGCAGCCAGGGCAAGC  
 GGGAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG225179 representing NM\_153422  
 Red=Cloning site Green=Tags(s)

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MERAGPNSVRSQQQRDPDWEAWLDDHRDFTFSYFIRKATRDMVNAWFSERVHNIIPVCKEGIRAHTESCS
CSLQQSPHADNTPGAPARKISASEFDRPLRPIVVKDSEGTVSFLSDSGKKEQMPLTPPRFDSDEGDQCS
RLLLELVKDISSHL DVTALCHKIFLHIHGLISADRYSLFLVCEDESSKDKFLISRLFDVAEGSTLEEASNNC
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NGGTFTEKDEKDFAAYLAFCGIVLHNAQLYETSLLENKRNOVLLDLASLIFEEQQSLEVIKKAIAATIIS
FMQVQKCTIFIVDEDCPDSFSRVFHMECEEVGGKPSDPLTREQDANKINYMYAQYVKNTEPLNIPDVTKD
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TALCTIRMFTDLNLVQNFQMKHEVLCRWILSVKKNYRKNVAYHNWRHAFNTAQCMFAALKAGKIQNKLTD
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TTLKI IKQAILATDLALYIKRRGEFFELIRKNQFSFEDPLQKELFLAMLMTACDL SAIKWPWPIQQR IAE
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```

TRTRPLE - GFP Tag - V

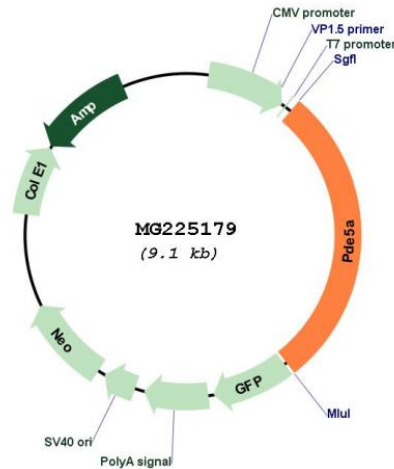
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



Plasmid Map:



ACCN: NM\_153422

ORF Size: 2595 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\\_153422.2](#), [NP\\_700471.2](#)

RefSeq Size: 6728 bp

RefSeq ORF: 2598 bp

Locus ID: 242202

UniProt ID: [Q8CG03](#)

**Cytogenetics:** 3 G1

**Gene Summary:** Plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. This phosphodiesterase catalyzes the specific hydrolysis of cGMP to 5'-GMP. Specifically regulates nitric-oxide-generated cGMP.[UniProtKB/Swiss-Prot Function]