

## Product datasheet for **MC220741**

### **Pde1c (NM\_001159953) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pde1c (NM_001159953) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pde1c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >MC220741 representing NM\_001159953  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGTCTCAACCAAGGAAATGAAGAATTCGAGAGCAACTCTCTGAAACACCTGCAACCTGAGCAGA  
 TCGAGAAAATCTGGCTTCGGCTCCGCGGGCTGAGGAAATAAAGAAAACGTCCCAGAGGTTACGGTCTTT  
 GGTCAAGCAATTAGAACGAGGAGAGGCCTCTGTGGTAGACCTTAAGAAGAATCTGGAATATGCAGCCACA  
 GTGCTTGAATCTGTATATATTGATGAAACAAGCGACTGCTGGATACAGAGGATGAGCTTAGTGACATTC  
 AATCAGATGCTGTGCCTCAGAAGTTCGGGATTGGCTGGCTCCACCTTCACACGCAGATGGGGATGAT  
 GCTTAGGAGAAGTGATGAGAAGCCAGGTTCAAGAGCATCGTCCATGCGGTGCAAGCTGGGATATTTGTG  
 GAAAGAATGTACAGACGGACATCAAACATGGTTGGGCTGAGCTATCCACCGGCTGTAATCGATGCATTGA  
 AGGATGTGGATACGTGGTCTTCGATGTCTTTCCCTCAATGAGGCCAGTGGAGATCATGCACTGAAGTT  
 CATTTTCTATGAATTACTCACACGTTATGACCTGATCAGCCGTTTTAAGATACCGATTTCTGCATTGTC  
 TCAATTTGTGGAGGCCCTCGAAGTGGTTACAGCAAGCACAAAAATCCTTACCATAACCTGATGCATGCAG  
 CTGACGTCACACAGACTGTGCATTACCTCCTTTATAAGACAGGAGTAGCAAACCTGGCTGACAGAGCTGGA  
 GATCTTTGCAATAATCTTTTCGGCTGCCATCCATGACTATGAACATACTGGAACACAAAACATTTCCAC  
 ATTCAGACTCGGTGAGATCCAGCTATCCTGTACAATGACAGATCTGTCCTGGAGAACCACCACCTGAGTG  
 CAGCCTACCGCCTTCTGCAGGAAGACGAAGAGATGAATATTCTGGTTAACCTCTCAAAGGATGACTGGAG  
 GGAGTTTCGAACCTTTGGTTATTGAGATGGTAATGGCCACAGATATGTCCTGTCAATTTCCAGCAAATCAA  
 GCCATGAAGACAGCCCTGCAGCAACCAGAAGCAATTGAGAAGCCGAAAGCCTTATCCCTCATGTTACACA  
 CAGCAGACATCAGTCATCCTGCGAAAGCATGGGACCTGCACCAGCTGGACCATGTCTCTCTGGAGGA  
 GTTCTTTAGACAGGGTGACAGAGAAGCAGAGCTGGGGCTGCCATTTTCTCCTTTGTGACAGAAAAGTCA  
 ACCATGGTTGCTCAGTCAACAAGTGGGTTTTATTGACTTATTGTGGAGCCACCTTCACTGTGCTCACGG  
 ACATGACCAGAGAAGATTGTGAGTCCATTAATTGACGAAAGCTCCCAGACTGGTGGGACAGGGCAGAGGAG  
 ATCAAGTTTGAACAGCATCAACTCATCAGATGCAAAGCGATCCGGTGTCAAGAGTTCTGGGTGAGATGGA  
 AGTGCTCCCATCAACAATTCTGTCACTTCTGTTGACTATAAGAGTTTTAAAGCCACTTGGACTGAGGTGG  
 TGCAGATCAATCGGGAGCGGTGGCGAGCCAAGGTACCCAAAGAAGAAAAAGCCAAGAAGGAAGCTGAAGA  
 GAAGGCTCGCCTGGCTGCTGAGGAAAAGCAAAAGGAAATGGAAGCCAAAAGCCAAGCTGAACAAGGCACA  
 ACCAGCAAAGGCGAGAAAAGACATCAGGAGAAGCCAAAAGTCAAGTCAATGGAACACGCAAGGGTGATA  
 ACCCTCGTGGGAAGAACTCCAAAGGAGAAAAGGCAGGCGAAAAGCAGCAGAACGGTGACTTGAAAGACGG  
 TAAAAATAAGGCAGACAAGAAGGATCACTCCAACACCGGAAATGAGTCAAAGAAAACAGATGGTACAAAAG  
 AAGCGTTCTCATGGCTCACCTGCTCCGAGCACTAGTTCACAAGTCGCATTACCTTGCCAGTCATCAAGC  
 CTCCTTTGCGTCACTTTAAGCGTCTGCTTATGCATCTAGCTCCTATGCACCTTCCGTCCCGAAGAAAAC  
 TGATGATCATCTGTAAAGATACAAGATGCTGGATCAGCGGATCAAGATGAAAAAGATCCAGAACATCTCT  
 CATCACTGGAACAAAAA**TAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2737\\_d04.zip](https://cdn.origene.com/chromatograms/ja2737_d04.zip)

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001159953

**Insert Size:** 2121 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](mailto: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](#)

**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\\_001159953.1](#), [NP\\_001153425.1](#)

**RefSeq Size:** 3907 bp

**RefSeq ORF:** 2121 bp

**Locus ID:** 18575

**UniProt ID:** [Q64338](#)

**Cytogenetics:** 6 27.65 cM

**Gene Summary:** Calmodulin-dependent cyclic nucleotide phosphodiesterase with a dual-specificity for cAMP and cGMP, which are key regulators of many important physiological processes (PubMed:8810348). Exhibits high affinity for both cAMP and cGMP (By similarity). Modulates the amplitude and duration of the cAMP signal in sensory cilia in response to odorant stimulation, hence contributing to the generation of action potentials. Regulates smooth muscle cell proliferation. Regulates the stability of growth factor receptors, including PDGFRB (Probable).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) uses an alternate exon structure in the 3' coding region compared to variant 2. It encodes isoform d, which is longer and has a distinct C-terminus, compared to isoform b.