

## Product datasheet for **SC310179**

### **PDE4D (NM\_006203) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE4D (NM_006203) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDE4D
Synonyms:	ACRDYS2; DPDE3; HSPDE4D; PDE4DN2; PDE43; STRK1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

```
>OriGene ORF sequence for NM_006203 edited
ATGCACGTGAATAATTTTCCCTTTAGAAGGCATTCTGGATATGTTTTGATGTGGACAAT
GGCACATCTGCGGGACGGAGTCCCTTGGATCCCATGACCAGCCCAGGATCCGGGGTAATT
CTCCAAGCAAATTTGTCCACAGTCAACGACGGGAGTCCCTTCTGTATCGATCCGACAGC
GATTATGACCTCTCTCAAAGTCTATGTCCCGAACTCCTCCATTGCCAGTGATATACAC
GGAGATGACTTGATTGTGACTCCATTTGCTCAGGTCTTGGCCAGTCTGCGAACTGTACGA
AACAACTTTGCTGCATTAACATAATTTGCAAGATCGAGCACCTAGCAAAAAGATCACCCATG
TGCAACCAACCATCCATCAACAAAAGCCACCATAACAGAGGAGGCCCTACCAGAAAACCTGGCC
AGCGAGACCCCTGGAGGAGCTGGACTGGTGTCTGGACCAGCTAGAGACCCTACAGACCAGG
CACTCCGTGAGTGTGGCTCCAACAAGTTTAAAAGGATGCTTAATCGGGAGCTCACC
CATCTCTCTGAAATGAGTCGGTCTGGAAATCAAGTGTGAGGTTTATATCAAACACATTC
TTAGATAAGCAACATGAAGTGGAAATTCCTTCTCCAACCTCAGAAGGAAAAGGAGAAAAAG
AAAAGACCAATGTCTCAGATCAGTGGAGTCAAGAAATTGATGCACAGCTCTAGTCTGACT
AATTCAAGTATCCCAAGTTTGGAGTAAAAGTGAACAAGAAGATGCTCTTGCCAAGGAA
CTAGAAGATGTGAACAAATGGGGTCTTCATGTTTTTTCAGAAATAGCAGAGTTGTCTGGTAAC
CGGCCCTTGACTGTTATCATGCACACCATTTTTAGGAACGGGATTTATTAACAAATTT
AAAATTCAGTAGATACTTTAATTACATATCTTATGACTCTCGAAGACCATTACCATGCT
GATGTGGCCTATCACAACAATATCCATGCTGCAGATGTTGTCCAGTCTACTCATGTGCTA
TTATCTACACCTGCTTTGGAGGCTGTGTTTACAGATTTGGAGATTCTTGCAGCAATTTTT
GCCAGTGAATACATGATGTAGATCATCTGGTGTGTCCAATCAATTTCTGATCAATACA
AACTCTGAACTTGCTTGTGACAATGATTCTCAGTCTTAGAGAACCATCATTGGCT
GTGGGCTTTAAATTTGCTTCAAGGAAAAGTGTGACATTTTCCAGAATTTGACCAAAAAA
CAAAGCAATCTTTAAGGAAAATGGTCAATGACATCGTACTTGCACAGATATGTCAAAA
CACATGAATCTACTGGCTGATTTGAAGACTATGGTTGAAACTAAGAAAAGTACAAGCTCT
GGAGTTCTTCTTGTATAATTATTCAGATAGGATTCAGGTTCTTCAAGATATGGTGCAC
TGTGCAGATCTGAGCAACCAACAAAGCCTCTCCAGCTGTACCGCCAGTGGACGGACCGG
ATAATGGAGGAGTTCTTCCGCCAAGGAGACCGAGAGAGGGAACGTGGCATGGAGATAAGC
CCCATGTGTGACAAGACAATGCTTCCGTGAAAAATCACAGGTGGGCTTCATAGACTAT
ATTGTTTATCCCTCTGGGAGACATGGGACACCTCGTCCACCCTGACGCCCAGGATATT
TTGGACACTTTGGAGACAATCGTGAATGGTACCAGAGCACAAATCCCTCAGAGCCCCTCT
CCTGCACCTGATGACCCAGAGGAGGGCCGGCAGGGTCAAACCTGAGAAATCCAGTTTGAA
CTAACTTTAGAGGAAGATGGTGTGAGTGCAGACACGAAAAGGACAGTGGCAGTCAAGTGGAA
GAAGACACTAGCTGCAGTGAAGACTCTTTGTAACAAGACTCAGAGTCTACTGAA
ATTCCTTGTGTAACAGGTTGAAGAGGAGGCAGTAGGGGAAGAAGAGGAAAGCCAGCCT
GAAGCCTGTGTCATAGATGATCGTTCTCCTGACACGTAA
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**5' Read Nucleotide Sequence:**

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>Reverse primer walk for NM_006203 unedited
CTACATGTAAGGACTCCCGTCTGTGACTGTGGACAAAATTTGCTTGGACAATTAACCCGG
ATCCTGGGCTGCTCATGGATCCAAGGGACTCCGTCCCGCAAATGTGCCATTGTCCACAT
CAAAACATATCCAGGAATGCCTTCTAGAGGGAAAATTATTACGTGCATCATGTTCCCAT
ATCTTCTGTCAATAATTTTTCTTGTCTCCTACGTTACATGTAGTGATTTTTACAGATG
AATTCCAACCTCTTGTGTTGAGCAACTATCGTGCAGCAATATTGCAACACGTATTGAATC
CCAAAAAATCTCCCCACCAATAAAAAACAATAGCACTTACAAAAGGCC
TTCCATGATTTGAAAAACAACATCACAGAACACTGCAGGTATGGATCCATCCATTTAG
GTTCCACTATTTAGTCTACATACTCAAATAACCAGTTCAACTAATAATCCTAACTGGCGG
CCAATATTGTCCCTGGAAAAATCTAACCGCCTTGAGTGTGAATTAATGCATCCTTAACGAA
GGACTCTGGAATGTGGGAAGAGAGGAGTCAAAGACAGTTTCTTGATATCCTTGCTAAAC
AAGTGTTCGCATGGAAATGGAAAATTCAGGTTGCTTTGCCATGCTCGTCTTTAGCAATG
AATATTGCTTTCTCTTTCTTAGCACATATTGATGCTGGTCACTTTAACGCAGTGCT
ACCGTCTGAGACGTGCTGTAAGCCTGTGCTGACGGGCTAGCAACCTGTATCACCAAA
GCCCACTCTTTCCAGATTCAGAATTGCTGGTTCAACTGCTAAGTANG
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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' genomic read for NM_006203 unedited GTTCACTACTGTTGCATATTGCCACNAAGCTGCTCAAACAAGATTGGAATTCATCTGTA AAAATCACTACATGTAACGTAGGAGACAAGAAAAATATTAATGACAGAAGATCTGCGAAC ATGATGCACGTGAATAATTTTCCCTTTAGAAAGGCATTCTGGATATGTTTTGATGTGGAC AATGGCACATCTGCGGGACGGAGTCCCTTGGATCCCATGACCAGCCCAGATCCGNNCT ATTCTNCNAGCANATTTTGTCCACAGTCAACGACGGNAGTCCCTTCTGTATCGATCCGAC AGCGATTATGACCTCTCTCCAAAGTCTATGTCCNGGACTCCTNCATTTGCAGTGATATA CCCGAGAATGACTTGAGTGGGACTCCATTGCTCAGGTCTGGCCATCTTGCAAAGTGT ACAAAACAACCTTTTGTGCTTAACCTAATTTGCAGATCGCCCCCTGGCCAAGATCACCC TTGTGCCAACCCCTCTTTAAACAAAGCCCCCTTAACAAAGAGGCCCTCCCCAAAACG GGCCCCCGAACCCCTGAAAAACCTGACTTGGGTTTTGGCCCCCTTTGAAACCTTAA ACAGACCCTCTCCGTGAAAAGGGCCCCCCCCAATTTTTTAAAAGAGGGGTTTTATTG GGGGGGCCCCCCCCCTTTCTTAAAAAAAAGGGGGGGCCGGGGGAAAAAAAAGGGGGC GGAGATTTTTATTATTACAACCACTTTTTTTTAATAATAACACCCCGAGAGGGGGGAGA AACTCTTTTCTCTCCCCCCCCCGGGGGGGGGGGGAGAAAAAAAACACCCCTCT TTCTCTCTTAATTGGGGGTTGGACAAAAAATTTTTTCGCCCCCCTTTTTTTTT
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_006203
<b>Insert Size:</b>	7000 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_006203.3</a></u> , <u><a href="#">NP_006194.2</a></u>
<b>RefSeq Size:</b>	5876 bp
<b>RefSeq ORF:</b>	2022 bp
<b>Locus ID:</b>	5144
<b>UniProt ID:</b>	<u><a href="#">Q08499</a></u>
<b>Cytogenetics:</b>	5q11.2-q12.1
<b>Domains:</b>	PDEase

**Protein Families:** Druggable Genome

**Protein Pathways:** Progesterone-mediated oocyte maturation, Purine metabolism

**Gene Summary:** This gene encodes one of four mammalian counterparts to the fruit fly 'dunce' gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple alternatively spliced transcript variants that encode functional proteins.[provided by RefSeq, Sep 2009]  
Transcript Variant: This variant (2) differs in the 5' UTR and coding region, compared to variant 1. Isoform PDE4D3 (also known as isoform 2) is shorter and has a distinct N-terminus, compared to isoform PDE4D4. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.