

Product datasheet for **SC314189**

PDE12 (NM_177966) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE12 (NM_177966) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDE12
Synonyms:	2'-PDE; 2-PDE
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene sequence for NM_177966 edited
 CAAAGCCGGCGGCTCGGCTCCTCAGCTCCACCTGACAGTAGGCCGCTGATCGGCCGCGG
 GTCTTGTGACCGCTAGGCCACCAAGTTTCATGTGGAGGCTCCAGGCGCCGCGCCGCGC
 TTCGGGTGATCCGGACGGCGGTGGAGAAGCTGAGCTGGGCTGAAGCGGGAGCCAGACAG
 CGGCGGGAGCGATGGAGCGCGCTGTAGTGCCTGCGTACCTTCGGAACCAAGCTGAGCC
 TGTCATTGCTTTGGCTGATGGTAGCCACAAGAATGCAGCGGACAGAGCGAGCCGCG
 TGGGTCGAGTCTCAGCCGCATCGCTACCAATGCCCTAAAGGGTCACGCTAAGGCGGCCG
 CCGCCAAGAAAGACAGGAAGAGCCGGCCGAATGCTAGCGCGGTGCGGCCCTGTTACGGGC
 CGGGGCTGAGCCGCTGTGTTCTGCGAGCCCGTGGTGAAGCTGTACTACCGGAAGAGG
 CAGTGGCTGAGGACGTGCTCAACGTGGATGCCTGGCAAGACGGCGCGGTGCTGCAGATCG
 GCGATGTTAAGTACAAGGTGGAGCGCAACCCGCCGCTTCACCGAACTGCAGTTGCCGC
 GCTACATCATGGCCGGTTCCCTGTGTGCCCCAACTCAGCCTCGAATTTGGGGATCCCG
 CCAGCTCCCTTTCCGCTGGTATAAGGAAGCCAAGCCGGAGCGGCGAGCCGAGGTGCG
 GTGTCCCTCGTATTGTCTCCCTCCTCACCTTCTTCTTGGACTGAGACTGATGTGG
 AGGAGCGTGTCTACACCCGTCGAATGCCGACATCGGGCTAAGGCTCAAGCTTCACTGCA
 CCCAGGCGATGGGCAGCGCTTTGGGCACAGCCGGGAGTTGGAAGTGTGTGTGTGTAG
 AGGCTGGGCTGGCACCTGCACCTTTGACCACCGCATCTCTACACGAAGAAGGTGACTG
 AGGACGCTCTCATCCGACTGTCTCTTACAACATCCTGGCAGACACGTACGCGCAGACTG
 AGTTCTCGCAACGGTTCTGTACCCATACTGTGCCCTACGCGCTGGAGCTCGACTACC
 GCCAGAACCTTATCCAGAAGGAACCTACCGGCTACAACGCCGATGTATCTGTTTGACGG
 AGGTTGACCGCGCAGTGTCTTCTGACAGCTTGGTACCGCCCTAGAGGCTTCGGGCTCG
 AGGGGGTGTTCGAATCAAGCAGCACGAAGGCTGGCCACTTTCTACCGAAAGTCAAGT
 TCAGCCTTCTTAGCCAGCATGACATTTTCATTCTACGAAGCCCTCGAGTCCGACCCACTTC
 ACAAAGAAGTCTGGAGAACTAGTTTTGTACCCATCAGCGCAGGAGAAGGTGCTCCAGA
 GATCTTCTGTTCTTCAGGTTTCAGTCTTTCAGTCTACAAAGGACTCTTCTAAAAGGATAT
 GTGTTGCTAATACCCATCTTTACTGGCATCCTAAAGGTGGGTATATTCGCCTCATTCAAA
 TGGCAGTAGCCTTGGCTCACATAAGACATGTTTCATGTGATCTGTATCCTGGCATACCAG
 TTATATTTTGTGGGACTTTAATAGTACCCATCAACAGGAATGTATCATTGTGTCATCA
 ATGGCAGCATTCCAGAGGATCATGAAGACTGGGCTTCAATGGGAGGAGGAAAGATGCA
 ATATGTCTCTTACACATTTCTTCAAGCTGAAAAGTGTCTGTGGTGAACCTGCTTACAAA
 ATTATGTTGGTGGCTTTTCATGGATGTCTAGATTACATTTTCATTGACTTAAATGCTTTAG
 AGGTTGAACAGGTGATTCCATTACCTAGTCATGAAGAAGTACCACCCACAGGCCTTAC
 CTAGTGTTTCCCATCCCTCTGATCACATAGCACTTGTATGTGATTTAAATGGAATAGA
 TGTGTGTTAATGGAATTGAAGTCTGAAAAGGAAGTAGTATTTTAGCAGAAAATTTAAT
 ATGAATCAAAGCTTATATGTAACTTCAAGGAGGAATGGTAAAATGTTACGCCCTCCTAG
 TTATGTTCTGATGTCTTCGTTATGAACTGTTGATGTTTGCATCATACATCTTCTCTTT
 CCTTGTTTTCTCTACAATTGGAGGAGAAACAAATATATTTCTTACTAGCAAAATAGAAA
 ATTGAATTATTTTCTCCAAATTGAGACTCTCAGAAAAGGAAGATTGAATTAGCGTGTTT
 TTTGTTTGTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGAGATGGAGTTTCACTCTTGTTG
 CCCAGGCTGGAGTGAATGGCACAATCTCGGCTCACTGCAACCTCCGCCCTCGGGTTTA
 AGCGATTCTCCTGCCTCAGCTTCCCGAGTAGCTGGGATTACAGGCATGCGCCAACATGTC
 TGGCTAATTTTGTATTTTGTAGAGAAATGGGGTTTCGCCACGTTGGCCAGGCTGGTCTT
 GAACTCCTGACCTCAGGTGATCCACCCACCTCGGCCTCCCAAAGTGTGGGATTACAGGC
 GTGAGCCACCGCACCCGGCCCTGTGTACATTTTATAAGAGAATTTTTTAGCTAGGAG
 TTCAGAATTTTTAAAGTACCATTTGAATGATCTTAATTTTCTTTCATGACAACACATTC
 CAAAATGAATCATGCTTATGTACTAAGAGGGAAAATGTATTTAAGTTAAGGGTGAGAGAC
 TTAAGTTATAGGTGACCTTAGAGACCTAAGGTGAGAGACTTGACACATGGAAGGAGTAAC
 ATTAGGTCTACCTCTACCTCAATTTAGTTAGCGATTTACTACAATTTTCAGAGCTTTAAC
 AAAAAAAAAAAAAAAAAA

Restriction Sites:

NotI-NotI

ACCN:	NM_177966
Insert Size:	2900 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 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
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_177966.4 , NP_808881.2
RefSeq Size:	3923 bp
RefSeq ORF:	1830 bp
Locus ID:	201626
UniProt ID:	Q6L8Q7
Cytogenetics:	3p14.3

Gene Summary:

Enzyme that cleaves 2',5'-phosphodiester bond linking adenosines of the 5'-triphosphorylated oligoadenylates, triphosphorylated oligoadenylates referred as 2-5A modulates the 2-5A system. Degrades triphosphorylated 2-5A to produce AMP and ATP (PubMed:26055709). Also cleaves 3',5'-phosphodiester bond of oligoadenylates (PubMed:21666256, PubMed:30389976, PubMed:26055709). Plays a role as a negative regulator of the 2-5A system that is one of the major pathways for antiviral and antitumor functions induced by interferons (IFNs). Suppression of this enzyme increases cellular 2-5A levels and decreases viral replication in cultured small-airway epithelial cells and Hela cells (PubMed:26055709).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the predominant transcript and encodes the canonical protein (isoform 1).