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Product datasheet for SC102646

PDE12 (AK055769) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE12 (AK055769) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDE12
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for AK055769, the custom clone sequence may differ by one or more nucleotides

CAAACTATATCACTTGTTGTCCATTTTTAATCTTTCTCTAACATACCCTAACTTCTTCTTGAAAATGCTT
AATTTTCTCTGTTTTGAGATGTAAATTTGCTATCCTGTTTTTCTTAAAACTTGGTAAGATCTTCAGCCAT
GAAGGACAGACAAACTGTAACCTTTCCATTTACAAAGCTGCATTTGAATTCAACTGTCCTTTTAAACTAA
GGAGTTTTACTGGTCTCGTGGCTAAAATTTTAAAGATGTAGGCCAGGTGCAGTGGCTCATGCCTGTAATC
CTATCACTTTTGGAGACCAAGGCGGGGATGGATCACCTGAGGTCAGGAGTTCAAGACCAGCCTGGCCAAC
ATGATGAAACTCCATCTCTGCTGAAAATACAAAAATTAGTCAGGCATGGTGGCACACACCTGTGGTCCCA
GCTACTCGGGAGGCTGAGGCAAGAGAATGGCTTGGGCCCGGGCGACGGAAGTTGCAGTGAGGCGAGATTG
CACCATTGCACTCCAGCCTGGGCAATAAGAGTGAAACTCTGTCTCAAAAAAAGAAAAAATGATATAAAGT
ATTTATTTGTGTTTATATTTTATGGATACGTGTCTATGTTTATAGATTGCCTGTATGGTACCAACTTGAC
ATAAATAAATTAGTACTCATAAATTAAGTAAATAAGCCCAAACGCTTTTCAAGTTCACAGGGCATTAGTA
ATCTGTGGTAAATGAAGATAGTTTAAAATTTGGGGTAAAATAAAATAGAAACATTTTCTGAATTTAATTT
AGATATTTTTCTGGGTCTATTTGTTAGACAGGTTTACACTATCTCTGCTATTTTTTTAAGGACCTAAAAC
TGAATGGACATAGAAAATTGAGGAAAGAAATAAAACCGTAACAATTATAAGAGGTTATAAAAGGTTCATG
GAACCTTTTTATGTCTTTTCTTGTGCAGTCAAAACCAATTGCAGGCTGGATGCAGTAGCTCACACTTGTA
ATCCCAGCACTTTGGGAGGCTGAGATGGGCAGATCACTTGAGCTCAGGAGTTTGAGACCATCCTGGGCAA
CATAGTGAAACTCTCTCACTACCAAAGTACAAAAGGAATTAGCTGGGCATGATGGTACACACTTGTAGTC
CCAGCTACTTGGGGGACTGAGATGGGAAAATTGCTTGAGCCCGGGAGTCAAAGGTTGCAGTAAGCCAAGA
TTGCACCACTACACTCCAGCCTGGGTGACAAAGTGAGACCCTGTCTCAAAAAAAAACAAAAAAAGGAAAA
GAAAACAATTGCAATTGGATTGATCTGTTTATAAGGCTTTATTAAAATTAGCTTTAGCATTTATAATACA
CTGGCACAAAGTTAGAATTTGGATTTCTCTTTTGAACAAGATTTTTGTATACATTAATAAGAAATAGTAA
AAGATTTTTGTTTACCTTTTGAGTAAACTGCAAAAAATATTAGTAATAAGAGGAGAGAATTTCCCTAATG
CTGTTTTTATTATGTCTTTTGATTGTTTGGAAAACTGAATCTCCCCTCTGTCAAAGAGTAAAATTTTTGC
TTTTTGAAATTTTTGAATTATCAGTTTGGCTAAATGAATAACTATTATCTTACAGTGACCTGTAATCTTA
TTTTGATCAAGTGTTTTAAACCTTTGATATTTGACAAACTTTCCAAAATCAAATGTAAAATTCTAACTTA
AATGTTTTCGACCTCAAGCTAACTTTTGGGCATTAAAGCCCTTGGAAGTCCAAATAGGGCCCCTGGAAGT
CCAAAAGAAACATATTAGGCTAATTTGGTATATTAAAATCATACAGGAAGCTGATCAAATAAAAAATGTT
GTTTAATTTTCTTTGAGTTGTATTTGTATAAATCTGTTATTAATATGCATCCCAAAATTGTATCATATTG
CTAAAATGTTGATAGATCTTGTTATATGTTATTGGTAATAATTGTTATCCTGTTAAATTATTGTATACCA
CAGAAATAATGAAATTTCTTTGTCAATTGCATCAGTAATCATGGCTCTTCTAAGTCTTTTGTCATTCACA
GATGATTATTGTTTTACTTGGATTCTTTTCAAAAGTGGTTTGTAATTGGCTACAGCCTAAAATCTGCTTG
TTC

5' Read Nucleotide Sequence:

>OriGene 5' read for AK055769 unedited
AATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGACCACTGTACTCCAGCCTG
GGCAACAGAGTGATACTCTATCTCAAAAAAAAAAGAAAGAAAGAAAGAAAAGAAAAAGAA
GCTTACAATCATGGTGGAAGGCGAAGAGGAGGAGCAGGCATATCACATGGCCAAAAAGGG
AGCAAGAGAAAGGTGAGAAAGACACTAGACTCTTTTTAAAACCAGCTCTCACATGAGCTA
ATGGAATAAGAACTCACTCATTACCACAAGGACAGAACCCAGCCATTCATGAGGGACCTG
CCACCATGACCCAAAAACCTCCTACTTGACCCAACCTCCAACACTGGGGATAACATTTCA
ACATGAGATTTGAAGAGGACAAATACTCAAACTATATCACTTGTTGTCCATTTTTAATCT
TTCTCTAACATACCCTAACTTCTTCTTGAAAATGCTTAATTTTCTCTGTTTTGAGATGTA
AATTTGCTATCCTGTTTTTCTTAAAACTTGGTAAGATCTTCAGCCATGAAGGACAGACAA
ACTGTAACCTTTCCATTTACAAAGCTGCATTTGAATTCAACTGTCCTTTTAAACTAAGGA
GTTTTACTGGTCTCGTGGCTAAAAATTTAAAGATGTANGCCAGGTGCAGTGGCTCATGCC
TGTAATCCTATCACTTTTTGAGACCAANGCGGNGATGGATCACCCTGAGTCANGAGTTCA
AGACCAGCCTGGCCAACATGATGAAACTCCATCTCTACTAAAAATACAAAATANTCAGGC
ATGGTGGCACACACCCTGTATCCCAGCTACTTCCGAAGGCTGAGGGCAGAAAATGCTTTG
ACCCCGNCNACCGNAATTTCANTGAGGCGAAATTGACCATTGCCCTCCAGCCTGGCAATA
GAAGTGAACCTTGCTCAAAAAAGAAAAATGATTAAGTATTATTTGGGTTTT

3' Read Nucleotide Sequence:

>OriGene 3' read for AK055769 unedited
GTTCTGCTATGGAACCGCGGCCGCAATCTANGATCGAGTTTTTTTTTTTTTTTTTGAAC
AGCAGATTTTAGGCTGTAGCCAATTACAAACCACTTTTGAAAAGAATCCAAGTAAAACAA
TAATCATCTGTGAATGACAAAAGACTTAGAAGAGCCATGATTACTGATGCAATTGACAAA
GAAATTTCATTATTTCTGTGGTATACAATAATTTAACAGGATAACAATTATTACCAATAA
CATATAACAAGATCTATCAACATTTTAGCAATATGATACAATTTTGGGATGCATATTAAT
AACAGATTTATACAAATACAACTCAAAGAAAATTAAACAACATTTTTTATTTGATCAGCT
TCCTGTATGATTTTAATATACCAAATTAGCCTAATATGTTTCTTTTGGACTTCCAGGGGC
CCTATTTGGACTTCCAAGGGCTTTAATGCCCAAAAGTTAGCTTGAGGTCGAAAACATTTA
AGTTAGAATTTTACATTTGATTTTGGAAAGTTTGTCAAATATCAAAGGTTTAAAACACTT
GATCAAAATAAGATTACAGGTCACTGTAAGATAATAGTTATTCATTTAGCCAAACTGATA
ATTCAAAAATTTCAAAAAGCAAAAATTTTACTCTTTGACAGAGGGGAGATTCAGTTTTCC
AAACAATCNAAAGACATAATAAAAACAGCATTAATGGAAATTCTCTCCTCTTATTACTAA
TATTTTTTTGCAGTTTACTCAAAAGGTAAACAAAAATCTTTTACTATTTCTTATTAATGT
ATACAAAAATCTTGTTCAAAAGAGAAATCCAATTCTACTTTGTGCCCGTGTATTATAAAT
GCTAAAGCTAATTTTAATAAAGCCTTATAACAGATCAATCCNATTGCCATTGGTTTCTTT
TCCTTTTTTGTATNTTTTGAGACGGGTCTCACA

Restriction Sites: NotI-NotI

ACCN: AK055769

Insert Size: 2500 bp

OTI Disclaimer: 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).

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:	AK055769.1
RefSeq Size:	2103 bp
RefSeq ORF:	2103 bp
Locus ID:	201626
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]