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Product datasheet for SC326291

PDE2A (NM_001143839) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE2A (NM_001143839) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDE2A
Synonyms:	CGS-PDE; cGSPDE; PDE2A1; PED2A4
Vector:	pCMV6 series

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001143839, the custom clone sequence may differ by one or more nucleotides

ATGGTCCTGGTGCTGCACCACATCCTCATCGCTGTTGTCCAATTCCTCAGGCGGGGCCAG
CAGGTCTTCCTCAAGCCGGACGAGCCGCCGCCGCCGCCGCAGCCATGCGCCGACAGCCTG
CAGGACGCCTTGCTGAGTCTGGGCTCTGTCATCGACATTTCAGGCCTGCAACGTGCTGTC
AAGGAGGCCCTGTCAGCTGTGCTCCCCCGAGTGGAAACTGTCTACACCTACCTACTGGAT
GGTGAGTCCCAGCTGGTGTGTGAGGACCCCCCACATGAGCTGCCCCAGGAGGGGAAAGTC
CGGGAGGCTATCATCTCCCAGAAGCGGCTGGGCTGCAATGGGCTGGGCTTCTCAGACCTG
CCAGGGAAGCCCTTGGCCAGGCTGGTGGCTCCACTGGCTCCTGATACCCAAGTGCTGGTC
ATGCCGCTAGCGGACAAGGAGGCTGGGGCCGTGGCAGCTGTCATCTTGGTGCACTGTGGC
CAGCTGAGTGATAATGAGGAATGGAGCCTGCAGGCGGTGGAGAAGCATACCCTGGTCGCC
CTGCGGAGGGTGCAGGTCCTGCAGCAGCGCGGGCCCAGGGAGGCTCCCCGAGCCGTCCAG
AACCCCCCGGAGGGGACGGCGGAAGACCAGAAGGGCGGGGCGGCGTACACCGACCGCGAC
CGCAAGATCCTCCAACTGTGCGGGGAACTCTACGACCTGGATGCCTCTTCCCTGCAGCTC
AAAGTGCTCCAATACCTGCAGCAGGAGACCCGGGCATCCCGCTGCTGCCTCCTGCTGGTG
TCGGAGGACAATCTCCAGCTTTCTTGCAAGGTCATCGGAGACAAAGTGCTCGGGGAAGAG
GTCAGCTTTCCCTTGACAGGATGCCTGGGCCAGGTGGTGGAAGACAAGAAGTCCATCCAG
CTGAAGGACCTCACCTCCGAGGATGTACAACAGCTGCAGAGCATGTTGGGCTGTGAGCTG
CAGGCCATGCTCTGTGTCCCTGTCATCAGCCGGGCCACTGACCAGGTGGTGGCCTTGGCC
TGCGCCTTCAACAAGCTAGAAGGAGACTTGTTCACCGACGAGGACGAGCATGTGATCCAG
CACTGCTTCCACTACACCAGCACCGTGCTCACCAGCACCCTGGCCTTCCAGAAGGAACAG
AAACTCAAGTGTGAGTGCCAGGCTCTTCTCCAAGTGGCAAAGAACCTCTTCACCCACCTG
GATGACGTCTCTGTCCTGCTCCAGGAGATCATCACGGAGGCCAGAAACCTCAGCAACGCA
GAGATCTGCTCTGTGTTCCTGCTGGATCAGAATGAGCTGGTGGCCAAGGTGTTCGACGGG
GGCGTGGTGGATGATGAGAGCTATGAGATCCGCATCCCGGCCGATCAGGGCATCGCGGGA
CACGTGGCGACCACGGGCCAGATCCTGAACATCCCTGACGCATATGCCCATCCGCTTTTC
TACCGCGGCGTGGACGACAGCACCGGCTTCCGCACGCGCAACATCCTCTGCTTCCCCATC
AAGAACGAGAACCAGGAGGTCATCGGTGTGGCCGAGCTGGTGAACAAGATCAATGGGCCA
TGGTTCAGCAAGTTCGACGAGGACCTGGCGACGGCCTTCTCCATCTACTGCGGCATCAGC
ATCGCCCATTCTCTCCTATACAAAAAAGTGAATGAGGCTCAGTATCGCAGCCACCTGGCC
AATGAGATGATGATGTACCACATGAAGGTCTCCGATGATGAGTATACCAAACTTCTCCAT
GATGGGATCCAGCCTGTGGCTGCCATTGACTCCAATTTTGCAAGTTTCACCTATACCCCT
CGTTCCCTGCCCGAGGATGACACGTCCATGGCCATCCTGAGCATGCTGCAGGACATGAAT
TTCATCAACAACTACAAAATTGACTGCCCGACCCTGGCCCGGTTCTGTTTGATGGTGAAG
AAGGGCTACCGGGATCCCCCCTACCACAACTGGATGCACGCCTTTTCTGTCTCCCACTTC
TGCTACCTGCTCTACAAGAACCTGGAGCTCACCAACTACCTCGAGGACATCGAGATCTTT
GCCTTGTTTATTTCCTGCATGTGTCATGACCTGGACCACAGAGGCACAAACAACTCTTTC
CAGGTGGCCTCGAAATCTGTGCTGGCTGCGCTCTACAGCTCTGAGGGCTCCGTCATGGAG
AGGCACCACTTTGCTCAGGCCATCGCCATCCTCAACACCCACGGCTGCAACATCTTTGAT
CATTTCTCCCGGAAGGACTATCAGCGCATGCTGGATCTGATGCGGGACATCATCTTGGCC
ACAGACCTGGCCCACCATCTCCGCATCTTCAAGGACCTCCAGAAGATGGCTGAGGTGGGC
TACGACCGAAACAACAAGCAGCACCACAGACTTCTCCTCTGCCTCCTCATGACCTCCTGT
GACCTCTCTGACCAGACCAAGGGCTGGAAGACTACGAGAAAGATCGCGGAGCTGATCTAC
AAAGAATTCTTCTCCCAGGGAGACCTGGAGAAGGCCATGGGCAACAGGCCGATGGAGATG
ATGGACCGGGAGAAGGCCTATATCCCTGAGCTGCAAATCAGCTTCATGGAGCACATTGCA
ATGCCCATCTACAAGCTGTTGCAGGACCTGTTCCCCAAAGCGGCAGAGCTGTACGAGCGC
GTGGCCTCCAACCGTGAGCACTGGACCAAGGTGTCCCACAAGTTCACCATCCGCGGCCTC
CCAAGTAACAACTCGCTGGACTTCCTGGATGAGGAGTACGAGGTGCCTGATCTGGATGGC
ACTAGGGCCCCCATCAATGGCTGCTGCAGCCTTGATGCTGAG

Restriction Sites: Please inquire

ACCN:	NM_001143839
Insert Size:	4146 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).
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_001143839.1, NP_001137311.1
RefSeq Size:	4146 bp
RefSeq ORF:	4146 bp
Locus ID:	5138
UniProt ID:	O00408
Cytogenetics:	11q13.4
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
Gene Summary:	Cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. Plays an important role in growth and invasion of malignant melanoma cells (e.g. pseudomyxoma peritonei (PMP) cell line) (PubMed:24705027).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) differs in the 5' UTR and uses an alternate start codon, compared to variant 1. The encoded isoform (PDE2A2) is shorter and has a distinct N-terminus, compared to isoform PDE2A3. This variant (2) is assembled from partial human transcripts. The full-length exon combination is inferred from the mouse ortholog (NM_001143849.1, see PMID: 21724846). 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.