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Product datasheet for SC331949

PDE4A (NM_001243121) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE4A (NM_001243121) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDE4A
Synonyms:	DPDE2; PDE4; PDE46
Vector:	pCMV6-Entry (PS100001)

View online »

Fully Sequenced ORF:

>SC331949 representing NM_001243121.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGAAGAGGAGTCGCAGTGCCCTGTCCGTGGCAGGGACCGGGGACGAGAGGTCGAGGGAGACCCCCGAA
TCCGACCGTGCCAACATGCTGGGGGCCGACCTGCGTCGCCCTCGCCGCCGCCTCTCGTCCGGTCCTGGC
CTGGGCTGGGCCCAGCCTGAGCCCTCGGACCCTGGGGTCCCTCTGCCGCCACGGCCCACCACCCTGCCG
CTGCTGATCCCACCGCGGATTTCCATCACCAGGGCCGAGAACGACAGCTTCGAGGCAGAGAATGGGCCG
ACACCATCTCCTGGCCGCAGCCCCCTGGACTCGCAGGCGAGCCCAGGACTCGTGCTGCACGCCGGGGCG
GCCACCAGCCAGCGCCGGGAGTCCTTCCTGTACCGCTCAGACAGCGACTATGACATGTCACCCAAGACC
ATGTCCCGGAACTCATCGGTCACCAGCGAGGCGCACGCTGAAGACCTCATCGTAACACCATTTGCTCAG
GTGCTGGCCAGCCTCCGGAGCGTCCGTAGCAACTTCTCACTCCTGACCAATGTGCCCGTTCCCAGTAAC
AAGCGGTCCCCGCTGGGCGGCCCCACCCCTGTCTGCAAGGCCACGCTGTCAGAAGAAACGTGTCAGCAG
TTGGCCCGGGAGACTCTGGAGGAGCTGGACTGGTGTCTGGAGCAGCTGGAGACCATGCAGACCTATCGC
TCTGTCAGCGAGATGGCCTCGCACAAGTTCAAAAGGATGTTGAACCGTGAGCTCACACACCTGTCAGAA
ATGAGCAGGTCCGGAAACCAGGTCTCAGAGTACATTTCCACAACATTCCTGGACAAACAGAATGAAGTG
GAGATCCCATCACCCACGATGAAGGAACGAGAAAAACAGCAAGCGCCGCGACCAAGACCCTCCCAGCCG
CCCCCGCCCCCTGTACCACACTTACAGCCCATGTCCCAAATCACAGGGTTGAAAAAGTTGATGCATAGT
AACAGCCTGAACAACTCTAACATTCCCCGATTTGGGGTGAAGACCGATCAAGAAGAGCTCCTGGCCCAA
GAACTGGAGAACCTGAACAAGTGGGGCCTGAACATCTTTTGCGTGTCGGATTACGCTGGAGGCCGCTCA
CTCACCTGCATCATGTACATGATATTCCAGGAGCGGGACCTGCTGAAGAAATTCCGCATCCCTGTGGAC
ACGATGGTGACATACATGCTGACGCTGGAGGATCACTACCACGCTGACGTGGCCTACCATAACAGCCTG
CACGCAGCTGACGTGCTGCAGTCCACCCACGTACTGCTGGCCACGCCTGCACTAGATGCAGTGTTCACG
GACCTGGAGATTCTCGCCGCCCTCTTCGCGGCTGCCATCCACGATGTGGATCACCCTGGGGTCTCCAAC
CAGTTCCTCATCAACACCAATTCGGAGCTGGCGCTCATGTACAACGATGAGTCGGTGCTCGAGAATCAC
CACCTGGCCGTGGGCTTCAAGCTGCTGCAGGAGGACAACTGCGACATCTTCCAGAACCTCAGCAAGCGC
CAGCGGCAGAGCCTACGCAAGATGGTCATCGACATGGTGCTGGCCACGGACATGTCCAAGCACATGACC
CTCCTGGCTGACCTGAAGACCATGGTGGAGACCAAGAAAGTGACCAGCTCAGGGGTCCTCCTGCTAGAT
AACTACTCCGACCGCATCCAGGTCCTCCGGAACATGGTGCACTGTGCCGACCTCAGCAACCCCACCAAG
CCGCTGGAGCTGTACCGCCAGTGGACAGACCGCATCATGGCCGAGTTCTTCCAGCAGGGTGACCGAGAG
CGCGAGCGTGGCATGGAAATCAGCCCCATGTGTGACAAGCACACTGCCTCCGTGGAGAAGTCTCAGGTG
GGTTTTATTGACTACATTGTGCACCCATTGTGGGAGACCTGGGCGGACCTTGTCCACCCAGATGCCCAG
GAGATCTTGGACACTTTGGAGGACAACCGGGACTGGTACTACAGCGCCATCCGGCAGAGCCCATCTCCG
CCACCCGAGGAGGAGTCAAGGGGGCCAGGCCACCCACCCCTGCCTGACAAGTTCCAGTTTGAGCTGACG
CTGGAGGAGGAAGAGGAGGAAGAAATATCAATGGCCCAGATACCGTGCACAGCCCAAGAGGCATTGACT
GCGCAGGGATTGTCAGGAGTCGAGGAAGCTCTGGATGCAACCATAGCCTGGGAGGCATCCCCGGCCCAG
GAGTCGTTGGAAGTTATGGCACAGGAAGCATCCCTGGAGGCCGAGCTGGAGGCAGTGTATTTGACACAG
CAGGCACAGTCCACAGGCAGTGCACCTGTGGCTCCGGATGAGTTCTCGTCCCGGGAGGAATTCGTGGTT
GCTGTAAGCCACAGCAGCCCCTCTGCCCTGGCTCTTCAAAGCCCCCTTCTCCCTGCTTGGAGGACCCTG
TCTGTTTCAGAGCATGCCCCGGGCCTCCCGGGCCTCCCCTCCACGGCGGCCGAGGTGGAGGCCCAACGA
GAGCACCAGGCTGCCAAGAGGGCTTGCAGTGCCTGCGCAGGGACATTTGGGGAGGACACATCCGCACTC
CCAGCTCCTGGTGGCGGGGGGTCAGGTGGAGACCCTACCTGA

Restriction Sites: SgfI-MluI

ACCN: NM_001243121

Insert Size: 2595 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:	NM_001243121.1
RefSeq Size:	4704 bp
RefSeq ORF:	2595 bp
Locus ID:	5141
UniProt ID:	P27815
Cytogenetics:	19p13.2
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
MW:	95.6 kDa
Gene Summary:	The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE4 subfamily. This PDE hydrolyzes the second messenger, cAMP, which is a regulator and mediator of a number of cellular responses to extracellular signals. Thus, by regulating the cellular concentration of cAMP, this protein plays a key role in many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.[provided by RefSeq, Jul 2011] Transcript Variant: This variant (5) contains additional exons at the 5' end compared to variant 1. It encodes a shorter isoform (5, also known as PDE4A8) with a distinct N-terminus compared to isoform 1. This isoform is expressed predominantly in skeletal muscle and brain, a pattern that differs from that of other isoforms, and thus may have a specific function in regulating cAMP levels in human skeletal muscle and brain (PMID:18095939). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.