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Product datasheet for MC222657

Pde2a (NM_001143849) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pde2a (NM_001143849) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pde2a
Synonyms:	CGS-PDE; cGSPDE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>MC222657 representing NM_001143849
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTCCTGGTGTTGCACCACATCCTCATCGCTGTTGTCCAATTCCTCAGGCGGGGCCAGCAGGTCTTCC
TCAAGCCGGACGAGCCGCCGCCGCAGCCATGCGCCGACAGCCTGCAGGATGCTTTGCTGAGCCTAGGCGC
CGTTATCGACATTGCTGGCCTGCGACAGGCTGCCAGGGATGCCCTCTCAGCCGTGCTCCCCAAAGTGGAG
ACTGTCTACACCTACCTGCTAGATGGGGAGTCCAGACTGGTGTGTGAGGACCCCCCTCATGAGCTGCCAC
AGGAAGGAAAAATTCGAGAAGCTGTGATCTCTCAGAAGCGGCTGAGTTGCAATGGGCTGGGACCTTCGGA
CCTACTGGGAAAGCCCTTGGCCAGGCTGGTGGCTCCACTGGCTCCTGACATGCAAGTGCTGGTCATACCC
CTGCTGGACAAGGAGACTGGAAGTGTGGCAGCTGTCATCTTGGTGCACTGTGGCCAGCTGAGTGACAGTG
AGGAACAGAGCTTGCAGGTGGTAGAGAAGCACGCTCTGGTAGCCCTGCGGAGGGTGCAGGCCCTGCAGCA
GCGCAGGCCTGAAGCTGTTCAGAACACGTCAGTGGATGCCTCTGAAGATCAAAAGGATGAGAAGGGGTAC
ACCGACCATGACCGAAAGATCCTGCAACTGTGTGGGGAACTCTTTGACTTGGATGCTACTTCTCTGCAGC
TCAAAGTCCTTCAATATCTGCAGCAGGAGACACAGGCCACTCACTGCTGCCTCCTGCTGGTGTCGGAGGA
CAATCTACAGCTTTCCTGCAAGGTCATTGGAGACAAAGTGCTGGGAGAAGAGGTCAGCTTTCCATTGACC
ATGGGACGTCTGGGGCAGGTGGTGGAAGACAAGCAGTGTATCCAGTTGAAGGACCTAACCTCTGACGATG
TGCAACAGCTGCAAAACATGTTGGGTTGTGAGCTGCAGGCTATGCTGTGTGTCCCTGTCATCAGCCGAGC
CACTGACCAGGTGGTGGCCCTGGCTTGCGCCTTCAACAAGCTTGGAGGAGATTTCTTCACAGATGAGGAT
GAACACGTGATCCAACACTGCTTCCACTACACAGGCACGGTGCTCACCAGCACCTTGGCCTTCCAGAAGG
AGCAGAAGCTCAAGTGTGAGTGCCAGGCTCTTCTCCAAGTGGCAAAGAACCTCTTCACCCACCTGGATGA
TGTCTCTGTCCTGCTACAGGAGATCATCACGGAAGCCAGAAACCTCAGCAACGCAGAGATCTGCTCGGTG
TTCCTGCTGGATCAGAACGAGCTGGTGGCCAAGGTGTTCGATGGTGGCGTTGTGGACGATGAGAGTTATG
AGATCCGCATCCCGGCGGACCAAGGCATCGCGGGCCACGTGGCGACTACGGGCCAGATCCTGAACATCCC
AGATGCATATGCCCATCCGCTTTTCTATCGCGGCGTAGATGACAGCACTGGCTTCCGCACGCGCAACATT
CTCTGCTTCCCTATCAAGAACGAGAACCAGGAGGTCATTGGTGTGGCTGAGCTAGTGAACAAGATCAATG
GGCCATGGTTCAGCAAGTTTGATGAGGACCTGGCCACAGCCTTCTCCATCTACTGTGGCATCAGCATCGC
CCACTCTCTCCTATACAAAAAGGTGAATGAAGCCCAATACCGCAGCCACCTGGCCAATGAGATGATGATG
TATCATATGAAGGTCTCTGATGATGAATACACCAAGCTTCTCCACGATGGCATCCAACCTGTGGCCGCCA
TTGACTCCAACTTTGCCAACTTTACCTACACGCCTCGGTCTCTGCCTGAGGACGACACTTCTATGGCCAT
CCTGAGCATGCTGCAAGACATGAACTTCATCAATAACTACAAAATTGACTGCCCAACTCTGGCCCGATTC
TGCCTGATGGTGAAGAAAGGCTACCGGGATCCACCCTACCACAACTGGATGCACGCCTTCTCTGTCTCTC
ATTTTTGCTACCTGCTCTACAAGAATCTGGAGCTCTCCAACTACCTCGAGGACATCGAGATCTTTGCATT
GTTTATTTCCTGCATGTGTCATGACCTGGACCACAGAGGCACAAACAACTCCTTCCAGGTGGCCTCGAAA
TCTGTGCTGGCCGCACTCTACAGCTCAGAGGGCTCTGTCATGGAGAGGCACCACTTTGCTCAAGCCATTG
CTATCCTCAACACCCACGGCTGCAATATCTTTGACCACTTCTCTCGGAAGGACTATCAGCGCATGCTGGA
CCTGATGAGGGACATCATCTTGGCTACAGACCTGGCACACCACCTCCGCATCTTCAAGGACCTGCAGAAG
ATGGCTGAAGTGGGTTATGACCGAAACAACAGGCAACACCACAGGCTTCTTCTGTGCCTCCTCATGACCT
CCTGTGACCTCTCTGACCAGACAAAGGGCTGGAAGACCACCAGAAAGATTGCAGAGCTGATCTACAAAGA
GTTCTTCTCCCAGGGAGACTTGGAGAAGGCCATGGGCAACCGACCGATGGAGATGATGGACCGTGAGAAG
GCCTACATCCCTGAGCTTCAGATCAGCTTTATGGAGCACATTGCCATGCCTATCTACAAGCTTTTACAAG
ACCTGTTCCCCAAGGCGGCAGAGCTGTATGAACGTGTGGCCTCCAACCGTGAGCACTGGACCAAGGTGTC
CCACAAGTTCACCATCCGAGGCCTCCCCAGTAACAACTCGCTGGATTTCCTGGACGAGGAATACGAGGTC
CCCGATTTGGACGGCACCAGAGCTCCTGTCAATGGCTGCTGCAGCCTCGAGGGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN:	NM_001143849
Insert Size:	2787 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_001143849.2, NP_001137321.1
RefSeq Size:	4053 bp
RefSeq ORF:	2787 bp
Locus ID:	207728
UniProt ID:	Q922S4
Cytogenetics:	7 E2
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. [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (3) represents use of an alternate promoter, has a distinct 5' UTR and 5' coding region, and uses an alternate in-frame splice site in the central coding region, compared to variant 1. The resulting isoform, PDE2A2 (see PMID:21724846) has a shorter and distinct N-terminus and lacks an internal segment, compared to isoform 6. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.