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Product datasheet for RC203172

PDE6D (NM_002601) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE6D (NM_002601) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE6D
Synonyms:	JBTS22; PDED
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC203172 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCAGCCAAGGACGAGCGGGCCAGGGAGATCCTGAGGGGCTTCAAACTAAATTGGATGAACCTTCGGG
ATGCTGAGACAGGGAAGATACTCTGGCAAGGAACAGAAGACCTGTCTGTCCCTGGTGTGGAGCATGAAGC
CCGTGTTCCCAAGAAAATCCTCAAGTGCAAGGCAGTGTCTCGAGAACTTAATTTTTCTTCGACAGAACAA
ATGGAAAAATTCCGCCTGGAACAAAAAGTTTACTTCAAAGGGCAATGCCTAGAAGAATGGTTCTTCGAGT
TTGGCTTTGTGATCCCTAACTCCACAAATACCTGGCAGTCCTTGATAGAGGCAGCACCCGAGTCCCAGAT
GATGCCAGCAAGCGTCTTAACTGGGAACGTTATCATAGAAACAAAGTTTTTTGACGACGATCTTCTTGTA
AGCACATCCAGAGTGAGACTTTTCTATGTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203172 protein sequence
Red=Cloning site Green=Tags(s)

MSAKDERAREILRGFKLNWMNLRDAETGKILWQGTEDLSVPGVEHEARVPKKILKCKAVSRELNFSSTEQ
MEKFRLEQKVYFKGQCLEEWFFEFGFVIPNSTNTWQSLIEAAPESQMMPASVLTGNVIIETKFFDDDLLV
STSRVRLFYV

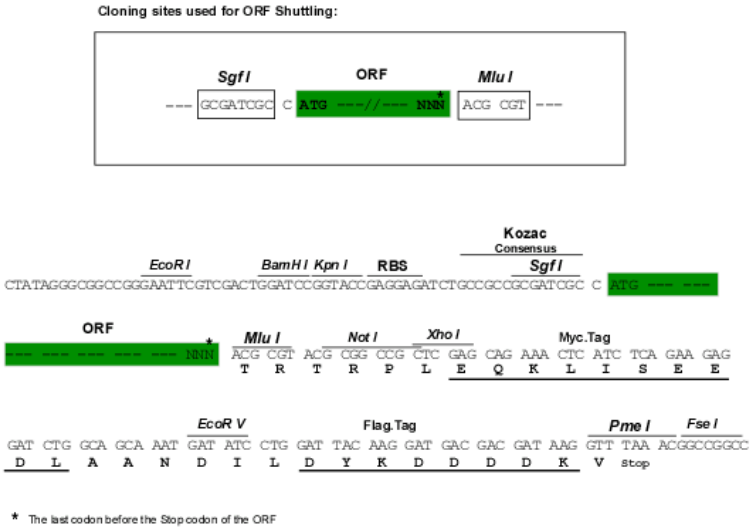
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6260_f03.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002601

ORF Size: 450 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.

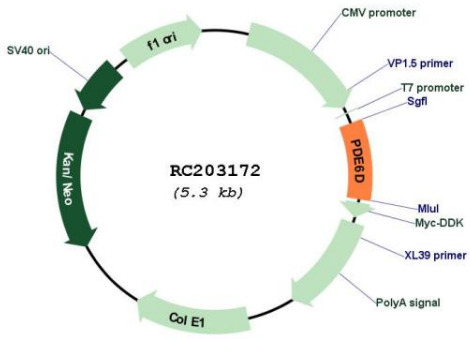
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

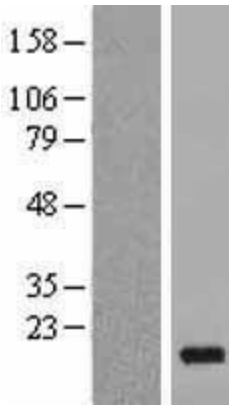
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_002601.4
RefSeq Size:	1214 bp
RefSeq ORF:	453 bp
Locus ID:	5147
UniProt ID:	O43924
Cytogenetics:	2q37.1
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
MW:	17.4 kDa
Gene Summary:	This gene encodes the delta subunit of rod-specific photoreceptor phosphodiesterase (PDE), a key enzyme in the phototransduction cascade. A similar protein in cow functions in solubilizing membrane-bound PDE. In addition to its role in the PDE complex, the encoded protein is thought to bind to prenyl groups of proteins to target them to subcellular organelles called cilia. Mutations in this gene are associated with Joubert syndrome-22. Alternative splicing results in multiple splice variants. [provided by RefSeq, Mar 2014]

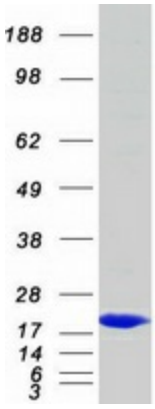
Product images:



Circular map for RC203172



Western blot validation of overexpression lysate (Cat# [LY419219]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203172 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PDE6D protein (Cat# [TP303172]). The protein was produced from HEK293T cells transfected with PDE6D cDNA clone (Cat# RC203172) using MegaTran 2.0 (Cat# [TT210002]).