

Product datasheet for **RG205601**

PDZD8 (NM_173791) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PDZD8
Synonyms:	PDZK8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG205601 representing NM_173791
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

ATGGGGCTGCTGCTCATGATCCTGGCGTCGGCCGTGCTGGGTTCTTCCTCACGCTCCTCGCCAGTTCT
TCCTGCTGTACCGCAGACAGCCCGAGCCGCGCGGACGAGGCCGCCCGCGCGGGCGAGGGCTTCGGCTA
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CTGGGTCAACAAGAAGATCAAGGTGGAGTTCGAGGAGCTGCTGCAGACCAAGACGGCCGGGCGCCTGCTG
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CGAGGAGCTGGCCTTCGAGGCGGAGGTGGAGTACAACGGGGCTTCCACCTGGCCATCGACGTGGACCTG
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AGGCACAATCATTAAGTCATAGTCCCAAACGTGTTCCAACAACACTTTCTATTAACCCCTTGAGCTAT
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TTGGAACACAATAATTCCTTGTAGAGAAGAAAAAGAGCAACTGATACAAGGAAAAAATCACTTCTTT
CTGCTGCCTTAGCTAAATCAGGTGAAAGGCTACAAGCTCTAACACTTCTTATGATTCACTACAGAGCAGG
CATTGAAGATATAGAACTTTAGAAAGTCTGTCTTTAGACCAGCACTCCAAAAAATAAGCAAGTACACA
GATGATACAGAAGAAGACCTTGATAATGAATAAGCCAATAAGACTCTCAGCCATTGACGAGCATAT
CAGATGACTTATTTGGCCATCCGAGTCTGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG205601 representing NM_173791

Red=Cloning site Green=Tags(s)

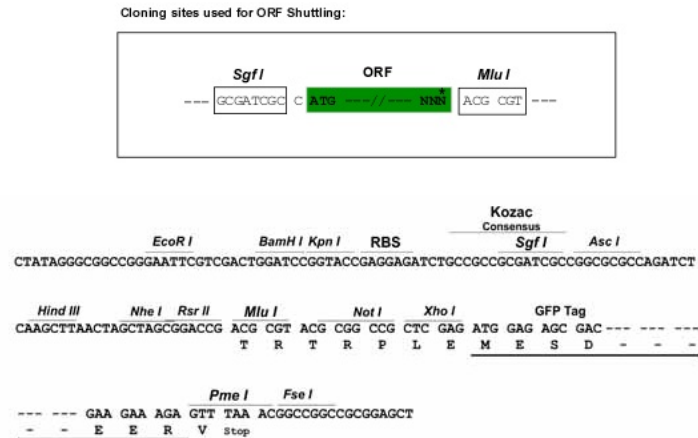
MGLLLMILASAVLGSFLTLLAQFFLLYRRQPEPPADEAARAGEGFRYIKPVPGLLLRELYLGGGRDEEPS
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LSSSVWEEKQRSSIKTVELIKGNLQSVGLTLRLVQSTDGYAGHVIETVAPNSPAAIADLQRGDRLIAIG
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GNKPPPLKTSITDPAQVSKPTQGSFAKPPVPPRPQAKVPLPSADAPNQAEVDLVEKPEKVVPPPLVDK
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LFDIEACHRYLNIALWCRDPFKLGLICLGHVSLKLEDAVALGCLATSNTEYLSKLRLLEAPSPKAIIVTRTA
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ETLLGLPPRVDAEASKSVNKTGLTRHIINTSSRLNLRQVSKTRLSEPTDLVEPSPKHTPNTSDNEGS
DTEVCGPNSPSKRGNSTGIKLVKEGGLDDSVFIIVKEIGRDLYRGLPTEERIQLKLEFMDKLQNEIDQE
LEHNNSLVREEKETDTRKKSLLSAALAKSGERLQALLMIHYRAGIEDIETLESLSLDQHSKKISKYT
DDTEEDLDNEISQLIDSQPFSSISDDLFGPSES

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_173791

ORF Size: 3462 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.

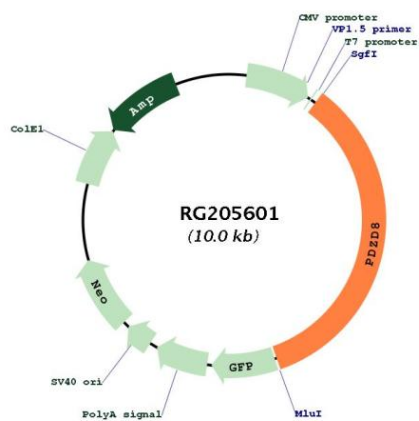
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<u>NM_173791.3, NP_776152.1</u>
RefSeq Size:	3853 bp
RefSeq ORF:	3465 bp
Locus ID:	118987
UniProt ID:	<u>Q8NEN9</u>
Cytogenetics:	10q25.3-q26.11
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	Molecular tethering protein that connects endoplasmic reticulum and mitochondria membranes (PubMed:29097544). PDZD8-dependent endoplasmic reticulum-mitochondria membrane tethering is essential for endoplasmic reticulum-mitochondria Ca(2+) transfer (PubMed:29097544). In neurons, involved in the regulation of dendritic Ca(2+) dynamics by regulating mitochondrial Ca(2+) uptake in neurons (PubMed:29097544). Plays an indirect role in the regulation of cell morphology and cytoskeletal organization (PubMed:21834987). May inhibit herpes simplex virus 1 infection at an early stage (PubMed:21549406).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG205601