

Product datasheet for **SC107070**

PDZD8 (NM_173791) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDZD8 (NM_173791) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDZD8
Synonyms:	PDZK8
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_173791, the custom clone sequence may differ by one or more nucleotides

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ATGGGGCTGCTGCTCATGATCCTGGCGTCGGCCGTGCTGGGTTCCCTTCCTCACGCTCCTCGCCAGTTCT
TCCTGCTGTACCGCAGACAGCCCGAGCCGCCGGCGGACGAGGCCGCCCGCGGGCGAGGGCTTCCGCTA
CATCAAGCCAGTGCCGGGCTGCTCCTAAGGGAGTACCTTTATGGCGGCGGCCGGGATGAGGAGCCCTCC
GGAGCGGGCCCTGAGGGCGGCGGACCCCCACCGCGGCCCGGAGACCCCGCCCGCGGACGCGGGAGA
CTTGCTACTTCTCAACGCCACCATCCTATTCTGTTCCGGGAGTTGCGGGACACCGCGCTGACCCGCCG
CTGGGTACCAAGAAGATCAAGGTGGAGTTCGAGGAGCTGCTGCAGACCAAGACGCGCGGCGCCTGCTG
GAGGGGCTGAGCCTGCGGACGTGTTCTGGGCGAGACGTTGCCCTTCATCAAGACCATCCGGCTCGTGC
GGCCAGTCGTGCCCTCGGCCACCGGGGAGCCCGATGGCCCTGAAGGGGAGGCGCTGCCCGCGCCTGCC
CGAGGAGCTGGCCTTCGAGGCGGAGGTGGAGTACAACGGGGGCTCCACCTGGCCATCGACGTGGACCTG
GTCTTCGGCAAGTCCGCCTACTTGTTTGTCAAGCTGTCCCGCGTGGTGGGAAGGCTGCGCTTGGTCTTTA
CGCGCGTGCCCTTCACCCACTGGTCTTCTCCTTCGTGGAAGACCCGCTGATCGACTTCGAGGTGCGCTC
CCAGTTTGAAGGGCGGCCATGCCCCAGCTCACCTCCATCATCGTCAACCAGCTCAAGAAGATCATCAAG
CGCAAGCACACCCTACCGAATTACAAGATCAGGTTTAAGCCGTTTTTCCATACCAGACCTTGAAGGAT
TTGAAGAAGATGAAGAGCATATCCATATACAACAATGGCACTTACTGAAGGCCGTCTTAAAGTTACGTT
GTTAGAATGTAGCAGTTACTCATTTTTGGATCCTATGACAGAGAGGCAAATGTTCAATTGTACACTTGAG
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AACTGTGGCTCCAACTCGCCTGCTGCAATTGCAGATCTTCAGCGGGGAGATCGACTTATCGCCATTGGA
GGTGTGAAATCACATCAACACTGCAAGTGTTGAAGCTTATCAAGCAGGCTGGTGACCGAGTCCTGGTGT
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AACTTTTTGTCAAGCTCATGCCAATCGGGTTATGAAGAGGAAGTGCCGGGTTGACAGTAGATACTGAA
AGTAGAGAGCTGGATTCTGAATTTGAAGACTTGCAAGTGATGTCAGAGCACAAAATGAGTTCAAAGATG
AGGCACAATCATTAAGTCATAGTCCCAACGTGTTCCAACAACACTTTCTATTAACCCCTTGAGCTAT
  
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ATCACCAGTTTTAAACCGTAAATTAGCTGTAGGAAGTCACCCACTACCACCGAAAATTCAGTCCAAAGAT
GGAAATAAACCTCCACCCCTAAAACTTCTGAGATAACAGACCCAGCACAAAGTGTCAAAACCAACCCAAG
GATCTGCTTTCAAACACCTGTGCCACCACGACCAAGCGAAAGTTCCTTTGCCCTCCGCCGATGCTCC
AAATCAGGCAGAACAGATGTTCTCGTTGAAAAGCCAGAGAAGGTGGTGCCACCTCCTCTGTAGATAAA
TCTGCTGAAAAGCAAGCAAAAAATGTGGATGCCATAGACGATGCAGCTGCACCTAAGCAATTTTTAGCAA
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AACATGGGAATCATCAGAAATTTTATCGTAATAAGCTAGGAAAATGGACAAGAACCAGAGCATCTGT
TTGTTTGACATAGAAGCCTGTCACAGGTACTTAACATTGCATTGTGGTGCAGGGATCCTTTCAAGTTGG
GAGGTCTCATCTGTTTGGGGCATGTTAGTTTAAAACTTGAAGATGTGGCTTTAGGATGCCTAGCTACATC
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CTACGCAATCTGAGTATGCAAAAGGGATTCAATGACAAATTTTGCTATGGTGACATTACTATTCATTCA
AATATTTGAAAGAAGGAGAATCAGACCACCATGTAGTTACTAACGTAGAAAAAGAAAAAGAACCCCATTT
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GAAACCTCTTAGGCCTGCCTCCTCGTGTGTATGCTGAAGCTAGCAAGTCAGTCAATAAAACAACAGGTT
TGACAAGGCATATTATCAATACTAGTTCTCGTTTATTAATTTGCGTCAAGTCTCTAAAACCTCGCCTTTC
TGAACCAAGAACCGATCTCGTAGAACCTTACCAAAACACACACCCCAACACGTCAGACAACGAAGGCAGT
GACACGGAGGTCTGTGGTCCAAACAGTCCTTCTAAACGGGGAAACAGCACAGGAATAAAGTTAGTGAGAA
AAGAGGGTGGTCTGGATGACAGTGTTCATTGCAGTTAAAGAAATTTGGTGTGATCTGTACAGGGGCTT
GCCTACAGAGGAAAGGATCCAGAACTAGAGTTCATGTTGGATAAGCTACAGAATGAAATGATCAGGAG
TTGGAACACAATAATTCCTTGTAGAGAAGAAAAAGAGACAACCTGATACAAGGAAAAAATCACTTCTTT
CTGCTGCCCTTAGCTAAATCAGGTGAAAGGCTACAAGCTTAACACTTCTTATGATTCACTACAGAGCAGG
CATTGAAGATATAGAACTTTAGAAAGTCTGTCTTTAGACCAGCACTCCAAAAAATAAGCAAGTACACA
GATGATACAGAAGAAGACCTTGATAATGAAATAAGCCAATAATAGACTCTCAGCCATTCAGCAGCATAT
CAGATGACTTATTTGGCCCATCCGAGTCTGTGTAG

**5' Read Nucleotide
Sequence:**

>OriGene 5' read for NM_173791 unedited
GGATTTTGTAAATACGACCTCACTATAGGGCGGCCGGAATTCGCACGAGGCGGAGGCGGT
GGCGGGATGGGGTGTCTGCTCATGATCCTGGCGTCGGCCGTGCTGGGTTCTTCTCAGC
CTCCTCGCCAGTTCTTCTGCTGTACCGCAGACAGCCGAGCCGCCGGCGGACGAGGCC
GCCCCGCGGGGCGAGGGCTTCCGCTACATCAAGCCAGTGCCGGGCTGCTCCTAAGGGAG
TACCTTTATGGCGGCGGCCGGGATGAGGAGCCCTCCGAGCGGCCCTGAGGGCGGCGCG
ACCCCCACCGGCGCCCCGAGACCCCCGCCCCGCGGAGACTTGCTACTTCCTC
AACGCCACCATCCTATTCTGTTCCGGGAGTTGCGGGACACCGCGCTGACCCGGCGCTGG
GTCACCAAGAAGATCAAGGGGGAGTTGAGGAGCTGCTGCAACCAAGACCGCGCGCGCC
TGCTGGAGGGCTGAGCCTGCGGACGTGTTCTGGGCGAGACGTGCCCTTCATCAAGACAT
CCCGCTCGTGCGGNACGTGCTGGCTCCGGCACCGGGGAAGCCGATTGCCCTTGAAGGGA
AGCGCCTGTCCGGCGNCTTGCCCCGAGGAGCTTGCTCTTCAGCCGAAGGTGAGTACAAC
GGGGCCTTNCACCTGCCATTGACGTTGACCTTGGTCTCCGGCAGTTCCGCTACTTGGTTG
TTCAAGCTGTCCCGCTTGGTGGGGAAGCTGCGCTTGGTCTTTACGCGCGTGCCCTTACC
CACTGGTTCTTCTCCTTCGTGGAAGACCCGCTGATCGACTTCAGTGCGCTCCAGTTTGA
AGGGCGGC

Restriction Sites:

NotI-NotI

ACCN:

NM_173791

Insert Size:

3300 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
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_173791.2 , NP_776152.1
RefSeq Size:	3853 bp
RefSeq ORF:	3465 bp
Locus ID:	118987
UniProt ID:	Q8NEN9
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]