

## Product datasheet for **RR207085**

### **Padi4 (NM\_017227) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Padi4 (NM_017227) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Padi4
Synonyms:	Pdi4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>RR207085 representing NM\_017227  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCCCAGGGTGCGGTGATCCATGTGGCCCTGAGGAGCCACCCATGCCGTGTGTGGTGGGCACGG  
CGACCCCCTGGATATCCGTGGCTCTGCTCCAAGGGGCTCCACGTCCTTCAGCATCACAGCCTCCCCAGA  
AGTTGTTGTAGATGTCATCCATGGTCTCCATCCAAGAAGAGTACCACGGGGGCCTCCAATGGCCTCTG  
GACCCCAAGCTGGAGGTGACCCTACAGATGAAAGCAGCCAGCAGTAGGATAGATGACCAGAAGGTTGAA  
TTTCTATTACGGACCCAAGACCTCATCAACCAAGCCCTGCTCTACCTACCGGGGTGAACTCTCCCT  
GAGTGGGATGTCACCCGACTGGCAAAGCGAAGCCAGCCAGCTGGGAAGGATCAGAGCACCTGGACC  
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TGGACTTCGAGGACGACAAGGTCTTAGACAACAAAGACCTGCAGGACATGTCACCAATGACCCTAAGCAC  
GAAGACTCCCAAAGACTTCTTTGACAAGTATCAGTTGGTGTGACGGTCCGAAGCCAAGTGAACAAA  
GTGAGAGTCTCCGGGCCACACGGGGCAAACCTGCCATCCAGATACAAGGTGGTCCAGGACCACAGCAGT  
TCTCCCACCGCTAGAGCTGCTGGGCGGCCAGCACAGCACGGACTTCTATGTGGAAGGCCTTGCTTTCCC  
TGACGCCGACTTCAAGGGGCTCATTCCCCTAACGATCTCCCTGTTGGACAAATCTAACCCGGAGCTCCCT  
GAAGCCCTGGTGTTCAGACACCGTGTGTTCCGTGTGGCCCTGGATCATGACGCCAACACTCAGC  
CCCCCAGGAGGTATACGTGTGCAGTTTTCCGACAATGAAGACTTCTAAAGTCACTGGCTACTTTTAC  
CAAGAAAGCCAAGTGCAAACCTGACTGTGTGCCAGAGGAGGAAAATCAAGATGACCAGTGGATGCAGGAT  
GAAATGGAGATTGGCTACATACAGGCCCCCAAGACGCTGCCTGTGGTCTTTGACTCCCCGAGGGACA  
GAGGCCTGAAGGATTTCCCTGTCAAACGAGTCTGGGTCCAAATTTTGGCTATGTGACCCGAGGGCTCTA  
TAGAGCAGAGGTCACTGGGCTGGATGCCTTTGGGAACCTGGAGGTGAGTCCCCCAGTCACTGTGAGAGGG  
AAGGAATACCCACTGGGCAGGATTCTCATCGGGAGCAGCGTTATTCCAGCAGTGAGAGCCGGGACATGC  
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CATCATCAACGGCCGCTGCTGCCTGGAGGAGAAGGTGTGCTCCCTGCTGGAGCCGCTGGGTCTGACTGC  
ACCTTCATCAACGACTTCTACAGCTATCACATGTACCACGGAGAGGTTCACTGTGGCACCAACGTGCGCA  
GGAAGCCCTTCGCCTCAAGTGGTGGCAGATGTTCCC

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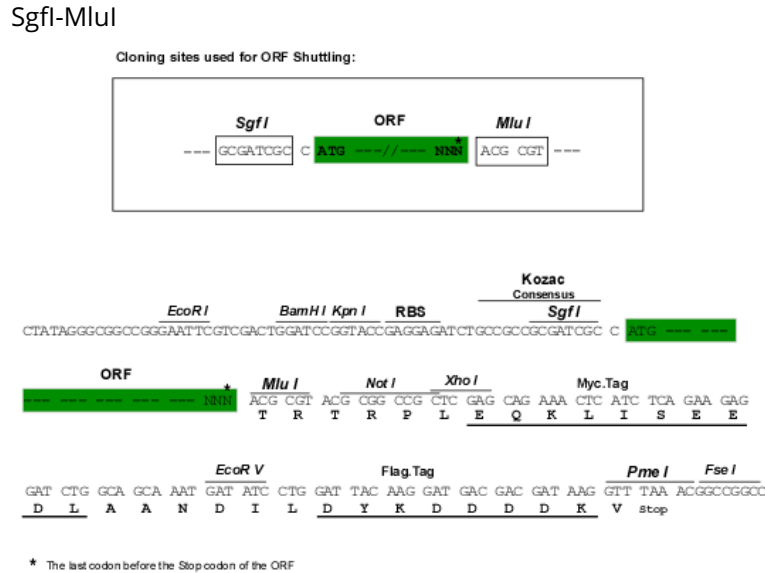
**Protein Sequence:** >RR207085 representing NM\_017227  
 Red=Cloning site Green=Tags(s)

MAQGAVIHVAPEEPHAVCVVGTATPLDIRGSAPRGSTSFISITASPEVVVDVIHGPPSKKSTTGASKWPL  
 DPKLEVTLMKAASSRIDDKVRISSYGPKTSSTQALLYLTGVLSLADVTRTGAKPAPAGKQSTWT  
 WGPDGHGAILLVNCDKEDPKSSGDMDFEDDKVLDNKDLQDMSPTLSTKTPKDFDKYQLVLQVPAKMNK  
 VRVFRATRGLPSRYKVVLPQQF SHRLELLGGQHSDFYVEGLAFPDADFKGLIPLTISLLDKSNPELP  
 EALVFQDTV MFRVAPWIMPTNTQPPQEVYVCRFSDNEDFLKSLATFTKKAKCKLTVCP EENQDDQWMQD  
 EMEIGYIQAPHKTLPVVFDSPDRGLKDFPVKRV MGNPFGYVTRGLYRAEVTGLDAFNLLEVSPVTVRG  
 KEYPLGRILIGSSGYSSSES RDMHQILQDFLGAQQVQAPVRLFSDWLVFGHVDFELSFVPARGKQGFRL  
 LSSPRACYQMFQELQTEGHGEASLFEGLKRKRQTI SDILSSQKLRDQNAVYVESCIDWNREVLKRELGLTE  
 GDIIIDIPQLFRIVGNRGNPKAEAFFPNMVMNMLVLGKHLGIPKPGPIINGRCCLEEKVCSLLEPLGLHC  
 TFINDFYSHMYHGEVHCGTNRVRKPF AFKWWHMVP

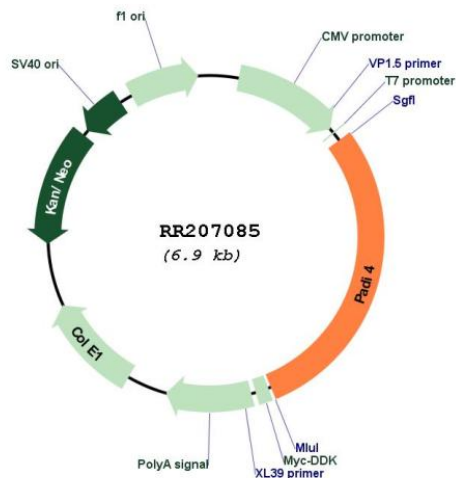
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_017227

ORF Size: 1998 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](mailto: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.

**RefSeq:** [NM\\_017227.1](#), [NP\\_058923.1](#)

**RefSeq Size:** 2258 bp

**RefSeq ORF:** 2001 bp

**Locus ID:** 29512

**UniProt ID:** [O88807](#)

**Cytogenetics:** 5q36

**MW:** 74.5 kDa

**Gene Summary:** converts arginine residues to citrulline residues; may regulate intermediate filament proteins and intermediate filament-associated proteins in cells undergoing degenerative processes [RGD, Feb 2006]