

Product datasheet for **RC208319**

PADI3 (NM_016233) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PADI3 (NM_016233) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PADI3
Synonyms:	PAD3; PDI3; UHS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC208319 representing NM_016233
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCGCTGCAGAGAATCGTGCCTGTGTCCCTGGAGCATCCCACCAGCGCGGTGTGTGGCTGGCGTGG
 AGACCCTCGTGGACATTTATGGGTCACTGCCTGAGGGCACAGAAATGTTTGAGGTCTATGGGACGCCTGG
 CGTGGACATCTACATCTCTCCCAACATGGAGAGGGGCCGGGAGCGTGCAGACACCAGCGGTGGCGCTTT
 GACGCGACTTTGGAGATCATCGTGGTCACTGAACCTCCCCAGCAATGACCTCAACGACAGCCATGTTGAGA
 TTTCTACCCTCCAGCCATGAGCCTCTGCCCTGGCCTATGCGGTGCTCTACCTCACCTGTGTTGACAT
 CTCTCTGGATTGCGACCTGAACCTGTGAGGGAAGGCAGGACAGGAACCTTTGTAGACAAGCGGCAGTGGGTC
 TGGGGGCCAGTGGGTATGGCGGCATCTTGTGGTGAACCTGTGACCGTATGATCCGAGCTGTGATGTCC
 AGGACAATTGTGACCAGCACGTGCACTGCCTGCAAGACCTGGAAGACATGTCTGTCATGGTCTCGGGAC
 GCAGGGCCCTGCAGCCCTCTTTGATGACCACAACTTGTCTCCATACCTCCAGCTATGATGCCAAACGG
 GCACAGGTCTTCCACATCTGCGGTCTGAGGATGTGTGTGAGGCCTATAGGCATGTGCTGGGCCAAGATA
 AGGTGTCTATGAGGTACCCCGCTTGCATGGGGATGAGGAGCGCTTCTTCGTGGAAGGCCTGTCTTCCC
 TGATGCCGGCTTACAGGACTCATCTCCTTCCATGTCACTCTGCTGGACGACTCCAACGAGGATTTCTCG
 GCATCCCTATCTTCACTGACACTGTGGTGTCCGAGTGGCACCCTGGATCATGACGCCACGACTCTGC
 CACCCCTAGAGGTGTATGTGTCCGTGTGAGGAACAACACGTGTTTTGTGGATGCGGTGGCAGAGCTGGC
 CAGGAAGCCCGGTGCAAGCTGACCATCTGCCACAGGCCGAGAACCACAACGACCGTGGATCCAGGAT
 GAGATGGAGCTGGGCTACGTTCAAGCGCCGCACAAGACCCTCCCGTGGTCTTTGACTCCCAAGGAATG
 GGAACCTGCAGGATTTCCCTTACAAAAGAATCCTGGGTCCAGATTTTGGTTACGTGACTCGGGAACCACG
 CGACAGGTCTGTGAGTGGCTGGACTCCTTTGGGAACCTGGAGGTCAGCCCTCCAGTGGTGGCCAATGGG
 AAAGAGTACCCCTGGGAGGATCCTCATTGGGGCAACCTGCCTGGGTCAAGTGGCCGAGGGTACCC
 AGGTGGTGCAGGACTTCTCCATGCCAGAAAGTGCAGCCCCCGTGGAGCTCTTTGTGGACTGGTTGGC
 CGTGGGCCATGTGGATGAGTTTCTGAGCTTTGTCCCTGCCCCGATGGGAAGGGCTTCCGGATGCTCCTG
 GCCAGCCCTGGGGCTGCTTCAAGCTCTTCCAGGAAAAGCAGAAGTGTGGCCACGGGAGGGCCCTCCTGT
 TCCAGGGGTTGTTGATGATGAGCAGGTCAAGACCATCTCCATCAACCAGGTGCTCTCCAATAAAGACCT
 CATCAACTACAATAAGTTTGTGCAGAGCTGCATCGACTGGAACCGTGGGTGCTGAAGCGGGAGCTGGC
 CTGGCAGAGTGTGACATCATTGACATCCACAGCTCTTCAAGACCAGAGGAAAAAGCAACGGCCTTCT
 TCCTGACTTGGTGAACATGCTGGTGTGGGAAAGCACCTGGGCATCCCCAAGCCCTTTGGGCCATCAT
 CAATGGCTGCTGCTGCCTGGAGGAGAAGGTGCGGTCCCTGCTGGAGCCGCTGGGCCTCCACTGCACCTTC
 ATTGATGACTTCACTCCATACCACATGCTGCATGGGGAGGTGCACTGTGGCACCAATGTGTGCAGAAAGC
 CTTCTCTTTCAAGTGGTGAACATGGTGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208319 representing NM_016233
Red=Cloning site Green=Tags(s)

MSLQRIVRVLSLEHPTSAVCVAGVETLVDIYGSVPEGTEMFEVYGTGPGVDIYISPNMERGRERADTRRWR
 DATLEIIIVMNSPNDLNDSHVQISYHSSHEPLPLAYAVLYLTCVDISLDCDLNCEGRQDRNFVDRQWV
 WGPSGYGGILLVNCRRDDPSCDVQDNCQHVHCLQDLEDMSVMVLRQTQGAALFDDHKLVLHTSSYDAKR
 AQVFHICGPEDEVCEAYRHVVGQDKVSYEVPRHLHGDEERFFVEGLSFPDAGFTGLISFHVTLDDSNEDFS
 ASPIFTDTVVFRVAPWIMTPSTLPPLEVVYVCRVRNNTCFVDAVAELARKAGCKLTICPQAEARNDRWIQD
 EMELGYVQAPHKTLPVVFDSPRNGELQDFPYKRILGPDFGYVTREPRDRSVSGLDSFGNLEVSPVAVANG
 KEYPLGRILIGGNLPGSSGRRVTQVVRDFLHAQKVQPPVELFVDWLAVGHVDFLSFVPPADGKGRMLL
 ASPGACFKLFQEKQKCGHGRALLFQGVVDEQVKTISINQVLSNKDLINYNKFKVQSCIDWNREVLKRELG
 LAECDIIDIPQLFKTERKATAFFPDLVNMLVLGKHLGIPKPGPIINGCCCLEEKVRSLLLEPLGLHCTF
 IDDFTPYHMLHGEVHCNTVCRKPFSEKWNMVP

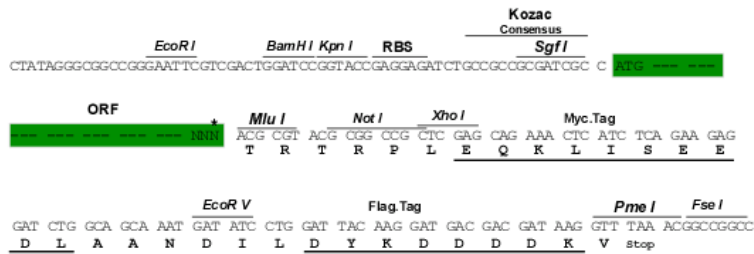
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8103_a01.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



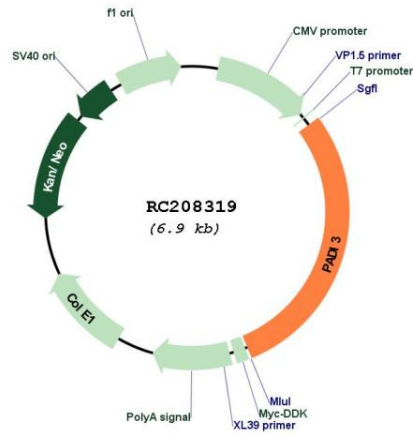
* The last codon before the Stop codon of the ORF

ACCN: NM_016233

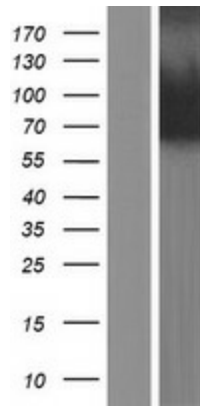
ORF Size: 1992 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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:	<p>NM_016233.2, NP_057317.2</p>
RefSeq Size:	<p>3189 bp</p>
RefSeq ORF:	<p>1995 bp</p>
Locus ID:	<p>51702</p>
UniProt ID:	<p>Q9ULW8</p>
Cytogenetics:	<p>1p36.13</p>
MW:	<p>74.7 kDa</p>
Gene Summary:	<p>This gene encodes a member of the peptidyl arginine deiminase family of enzymes, which catalyze the post-translational deimination of proteins by converting arginine residues into citrullines in the presence of calcium ions. The family members have distinct substrate specificities and tissue-specific expression patterns. The type III enzyme modulates hair structural proteins, such as filaggrin in the hair follicle and trichohyalin in the inner root sheath, during hair follicle formation. Together with the type I enzyme, this enzyme may also play a role in terminal differentiation of the epidermis. This gene exists in a cluster with four other paralogous genes. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RC208319



Western blot validation of overexpression lysate (Cat# [LY414107]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208319 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).