

Product datasheet for **RC213501**

PADI1 (NM_013358) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | PADI1 (NM_013358) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | PADI1 |
| Synonyms: | HPAD10; PAD1; PDI; PDI1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>RC213501 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCCAAGAGAGTTGTGCAGCTGTCCCTGAAGATGCCTACCCATGCCGTGTGTGGTGGGAGTCG
 AGGCACATGTGGACATTCACAGTGATGTGCCCAAGGGTGCCAACAGCTTCAGGGTCTCTGGAAGCTCCGG
 GGTGGAGGTCTTCATGGTCTACAACCGCACACGTGTAAAAGAGCCCATAGGCAAGGCCCGTTGGCCGCTA
 GACACTGATGCAGACATGGTTCGTATCTGTGGGCACAGCCAGTAAGGAATTAAGGACTTCAAGGTGAGGG
 TCTCTACTTTGGGGAGCAGGAAGACCAAGCTCTGGGCCGAGCGTGCTTACCTCACTGGCGTCGATAT
 TTCCTTGAGGTTGACACAGGCCGCACAGGCAAGGTGAAGAGGAGCAAGGGGACAAGAAAACCTGGCGC
 TGGGGCCCTGAGGGCTATGGGGCTATCTGCTGGTGAAGTGTACCGGGACAATCACAGGTCCGAGAGC
 CTGACCTACCCACAGCTGGCTGATGTCGCTGGCTGACCTGCAGGACATGTCCCAATGCTGCTGAGCTG
 CAATGGCCCCGACAAGCTCTTCGACAGCCACAAGCTTGTCTTGAACGTGCCCTTTTCTGATTCCAAAAGA
 GTGAGGGTCTTCTGTGCCAGGGGTGGGAATTCCTCTCGGACTACAAACAGGTGCTGGGGCCCCAGTGTC
 TGTCTATGAAGTTGAGCGACAGCCAGGGGAGCAGGAGATCAAGTTCTATGTGGAGGGGGTGACCTTCCC
 CGATGCCGATTTCTAGGGCTGGTTTCCCTCAGTGTGACCTGGTGGACCCGGGGACCCTGCCCGAGGTG
 ACCCTTTCACAGACACTGTGGGCTTCCGCATGGCCCCCTGGATCATGACGCCAACACTCAGCCTCCTG
 AGGAGCTGATGTGTGCAGAGTGATGGACACTCATGGCTCCAATGAGAAATTCCTGGAGGACATGTCTTA
 TCTGACATTGAAAGCCAACTGCAAGCTGACCATCTGCCCTCAAGTTGAAAATCGAAATGACCGCTGGATC
 CAGGACGAGATGGAGTTTGGCTACATCGAGGCCCTCACAAATCCTTCCCGTGGTCTTTGACTCCCCC
 GGAACAGGGGCCGAAAAGATTTCCCTATAAGAGGATCCTGGGTCCTGACTTTGGATATGTTACCCGGGA
 GATCCCGCTCCCTGGTCCCTCCAGCCTTGACTCCTTCGGCAACCTGGACGTCAGCCCGCCCGTCACGGTG
 GCGGCGACGGAATACCCCTGGGCCGGATCCTCATCGGGAGCAGCTTCCCAAGTCCGGTGGGCGGCAGA
 TGGCCAGGGCAGTGCGGAACTTCTGAAGGCACAGCAGGTGCAGGCACCCGTGGAGCTCTACTCGGACTG
 GCTCTCTGTGGGCCATGTGGACGAGTTTCTGACCTTTGTGCCTACCTTGACCAAAGGGCTTCCGGCTG
 CTCCTGGCTAGCCCCAGCGCTTGCCTCAAACCTTCCAAGAGAAGAAAGAGGGTTATGGGGAGGCAG
 CCCAGTTTGATGGGTTAAAACACCAGGCAAAAGAAGCATTAAATGAGATGCTGGCAGACAGACACCTCCA
 GAGAGACAATCTTCATGCACAGAAATGCATTGACTGGAACCGTAATGTGCTGAAGCGGGAGCTGGGCCTG
 GCAGAGAGTGACATCGTGGACATTCGCCAGCTCTTCTTCTGAAAACCTTCTACGCGGAAGCCTTCTTCC
 CAGACATGGTTAACATGGTGGTCTTAGGCAAGTACCTGGGCATCCCAAGCCCTACGGGGCCATCATCAA
 TGGCCGCTGCTGCCTGGAGGAGAAGGTGCAAGTCCCTGCTGGAGCCTCTGGGCCTGCACTGCATCTTCATT
 GATGACTACTTGTCTACCACGAGCTGCAGGGGAGATCCACTGTGGCACCACGTGCGCAGGAAGCCCT
 TTCCTTCAAATGGTGGAAACATGGTGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

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_013358.3](#)

RefSeq Size: 3847 bp

RefSeq ORF: 1992 bp

Locus ID: 29943

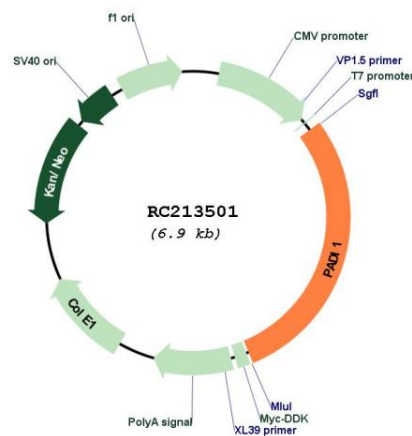
UniProt ID: [Q9ULC6](#)

Cytogenetics: 1p36.13

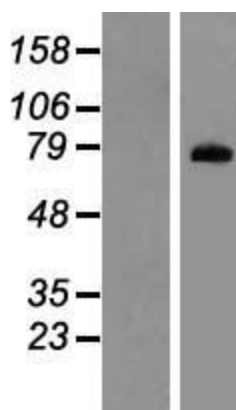
MW: 74.7 kDa

Gene Summary: 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 I enzyme is involved in the late stages of epidermal differentiation, where it deiminates filaggrin and keratin K1, which maintains hydration of the stratum corneum, and hence the cutaneous barrier function. This enzyme may also play a role in hair follicle formation. This gene exists in a cluster with four other paralogous genes. [provided by RefSeq, Jul 2008]

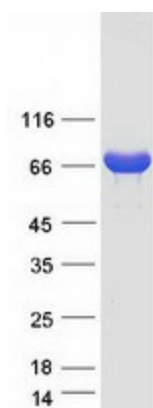
Product images:



Circular map for RC213501



Western blot validation of overexpression lysate (Cat# [LY415661]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213501 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PADI1 protein (Cat# [TP313501]). The protein was produced from HEK293T cells transfected with PADI1 cDNA clone (Cat# RC213501) using MegaTran 2.0 (Cat# [TT210002]).