

## Product datasheet for TP313501

#### OriGene Technologies, Inc.

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## PADI1 (NM 013358) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human peptidyl arginine deiminase, type I (PADI1), 20 μg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC213501 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MAPKRVVQLSLKMPTHAVCVVGVEAHVDIHSDVPKGANSFRVSGSSGVEVFMVYNRTRVKEPIGKARWP

L

DTDADMVVSVGTASKELKDFKVRVSYFGEQEDQALGRSVLYLTGVDISLEVDTGRTGKVKRSQGDKKTWR WGPEGYGAILLVNCDRDNHRSAEPDLTHSWLMSLADLQDMSPMLLSCNGPDKLFDSHKLVLNVPFSDS

KR

VRVFCARGGNSLSDYKQVLGPQCLSYEVERQPGEQEIKFYVEGLTFPDADFLGLVSLSVSLVDPGTLPEV TLFTDTVGFRMAPWIMTPNTQPPEELYVCRVMDTHGSNEKFLEDMSYLTLKANCKLTICPQVENRNDRW

|

QDEMEFGYIEAPHKSFPVVFDSPRNRGLKDFPYKRILGPDFGYVTREIPLPGPSSLDSFGNLDVSPPVTV GGTEYPLGRILIGSSFPKSGGRQMARAVRNFLKAQQVQAPVELYSDWLSVGHVDEFLTFVPTSDQKGFRL LLASPSACLKLFQEKKEEGYGEAAQFDGLKHQAKRSINEMLADRHLQRDNLHAQKCIDWNRNVLKRELG

L

AESDIVDIPQLFFLKNFYAEAFFPDMVNMVVLGKYLGIPKPYGPIINGRCCLEEKVQSLLEPLGLHCIFI

DDYLSYHELQGEIHCGTNVRRKPFPFKWWNMVP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 74.5 kDa

**Concentration:** >0.05 μg/μL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.





#### PADI1 (NM\_013358) Human Recombinant Protein - TP313501

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 037490

Locus ID: 29943
UniProt ID: Q9ULC6
RefSeq Size: 3847
Cytogenetics: 1p36.13
RefSeq ORF: 1989

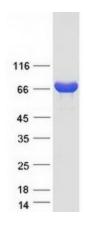
Synonyms: HPAD10; PAD1; PDI; PDI1

**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:**



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]).