

Product datasheet for **TR310632**

PADI1 Human shRNA Plasmid Kit (Locus ID 29943)

Product data:

Product Type:	shRNA Plasmids
Product Name:	PADI1 Human shRNA Plasmid Kit (Locus ID 29943)
Locus ID:	29943
Synonyms:	HPAD10; PAD1; PDI; PDI1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PADI1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 29943). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM_013358</u> , <u>NM_013358.1</u> , <u>NM_013358.2</u> , <u>BC130574</u> , <u>BC136402</u> , <u>NM_013358.3</u>
UniProt ID:	<u>Q9ULC6</u>
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .


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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).