

### Product datasheet for RC223889L2

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OriGene Technologies, Inc.

# PADI2 (NM\_007365) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** PADI2 (NM\_007365) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PADI2

Synonyms: PAD-H19; PAD2; PDI2

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

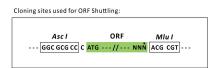
E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC223889).

Sequence:

**Restriction Sites:** Ascl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_007365

ORF Size: 1995 bp



#### PADI2 (NM\_007365) Human Tagged Lenti ORF Clone - RC223889L2

**OTI Disclaimer:** 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:** <u>NM 007365.1</u>

 RefSeq Size:
 2348 bp

 RefSeq ORF:
 1998 bp

 Locus ID:
 11240

 UniProt ID:
 Q9Y2J8

 Cytogenetics:
 1p36.13

Domains: PAD

**MW:** 75.4 kDa

**Gene Summary:** This gene encodes a member of the peptidyl arginine deiminase family of enzymes, which

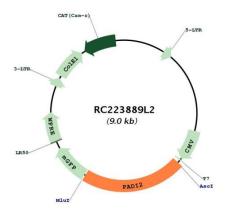
catalyze the post-translational deimination of proteins by converting arginine residues into citrullines in the presence of calcium ions. The family members have distinct substrate specificities and tissue-specific expression patterns. The type II enzyme is the most widely expressed family member. Known substrates for this enzyme include myelin basic protein in the central nervous system and vimentin in skeletal muscle and macrophages. This enzyme is thought to play a role in the onset and progression of neurodegenerative human disorders,

including Alzheimer disease and multiple sclerosis, and it has also been implicated in glaucoma pathogenesis. This gene exists in a cluster with four other paralogous genes.

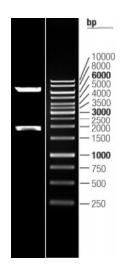
[provided by RefSeq, Jul 2008]



## **Product images:**



Circular map for RC223889L2



Double digestion of RC223889L2 using Ascl and Mlul