

<b>P312-911E-05</b>	<b>3 x 5 nmol</b>
<b>P312-911E-20</b>	<b>3 x 20 nmol</b>
<b>P312-911E-50</b>	<b>3 x 50 nmol</b>

## PAD6 siRNA Set I

siRNA duplexes targeted against three exon regions

### Catalog # P312-911E

Lot # Z2061-73

### Specificity

PAD6 siRNAs are designed to specifically knock-down human PAD6 expression.

### Product Description

PAD6 siRNA is a pool of three individual synthetic siRNA duplexes designed to knock-down human PAD6 mRNA expression. Each siRNA is 19-25 bases in length. The gene accession number is [NM\\_207421](#).

### Gene Aliases

PADI6

### Storage and Stability

The lyophilized powder is stable for at least 4 weeks at room temperature. It is recommended that the lyophilized and resuspended siRNAs are stored at or below -20°C. After resuspension, siRNA stock solutions  $\geq 2$   $\mu$ M can undergo up to 50 freeze-thaw cycles without significant degradation. For long-term storage, it is recommended that the siRNA is stored at -70°C. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

### Scientific Background

PAD6 or PADI6 is a member of the peptidylarginine deiminases which convert arginine residues to citrulline residues in the presence of calcium ions. The PAD family members are thought to be involved in multiple sclerosis and rheumatoid arthritis pathophysiology, and they play a role in epidermis homeostasis (1). PAD6 is essential for formation of a novel oocyte-restricted fibrous structure, the cytoplasmic lattices (CPLs). PAD6/CPL superstructure plays a key role in regulating microtubule-mediated organelle positioning and movement (2).

### References

1. Vossenaar, E R. Et al: PAD, a growing family of citrullinating enzymes: genes, features and involvement in disease. *Bioessays*. 2003 Nov;25(11):1106-18.
2. Kan, R. Et al: Regulation of mouse oocyte microtubule and organelle dynamics by PADI6 and the cytoplasmic lattices. *Dev Biol*. 2011 Feb 15;350(2):311-22.

### Formulation

The siRNAs are supplied as a lyophilized powder and shipped at room temperature.

### Reconstitution Protocol

Briefly centrifuge the tubes (maximum RCF 4,000g) to collect lyophilized siRNA at the bottom of the tube. Resuspend the siRNA in 50  $\mu$ l of DEPC-treated water (supplied by researcher), which results in a 1x stock solution (10  $\mu$ M). Gently pipet the solution 3-5 times to mix and avoid the introduction of bubbles. Optional: aliquot 1x stock solutions for storage.

### Related Products

Product Name	Catalog Number
PAD1 Protein	P312-30G
PAD2 Protein	P312-30BG
PAD3 Protein	P312-30CG
PAD4 Protein	P312-30DG
PAD6 Protein	P312-30FG
PAD Cocktail, Active	P312-37C

## PAD6 siRNA Set I

siRNA duplexes targeted against three exon regions

Catalog Number	P312-911E
Specific Lot Number	Z2061-73
Packaging Specifications	2.5 nmol/tube for 3 x 5 nmol
Format	Lyophilized powder
Stability	1yr at -70°C from date of shipment
Storage & Shipping	The lyophilized powder is stable for at least 4 weeks at room temperature. It is recommended that the lyophilized and resuspended siRNAs are stored at or below -20°C. After resuspension, siRNA stock solutions $\geq 2$ $\mu$ M can undergo up to 50 freeze-thaw cycles without significant degradation. For long-term storage, it is recommended that the siRNA is stored at -70°C. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

**FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.**