

## Active Recombinant Human PADI3, Flag-tagged

Cat. No. PADI3-19H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Human PADI-3, also known as Peptidyl arginine deiminase, type III, 1-664(end), with C-terminal FLAG-tag, MW= 75 kDa, expressed in a Baculovirus infected Sf9 cell expression system.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>ProteinLength</b>	1-664 a.a.
<b>Description</b>	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 III enzyme modulates hair structural proteins, such as filaggrin in the hair follicle and trichohyalin in the inner root sheath, during hair follicle formation. Together with the type I enzyme, this enzyme may also play a role in terminal differentiation of the epidermis. This gene exists in a cluster with four other paralogous genes.
<b>Form</b>	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 3 mM DTT, 20% glycerol, and 80 µg/ml FLAG peptide
<b>Bio-activity</b>	≥22 pmole/min/µg
<b>Molecular Mass</b>	75 kDa

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<b>Purity</b>	≥53%
<b>Applications</b>	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.
<b>Storage</b>	>6 months at –80°C.
<b>Warning</b>	Avoid freeze/thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	PADI3?peptidyl arginine deiminase, type III [?Homo sapiens?(human) ]
<b>Official Symbol</b>	PADI3
<b>Synonyms</b>	PADI3; PAD3; PDI3; peptidyl arginine deiminase, type III; protein-arginine deiminase type-3; peptidylarginine deiminase III; protein-arginine deiminase type III; NP_057317.2; EC 3.5.3.15
<b>Gene ID</b>	<a href="#">51702</a>
<b>mRNA Refseq</b>	<a href="#">NM_016233</a>
<b>Protein Refseq</b>	<a href="#">NP_057317</a>
<b>MIM</b>	<a href="#">606755</a>
<b>UniProt ID</b>	Q9ULW8
<b>Chromosome Location</b>	1p36.13
<b>Pathway</b>	protein citrullination

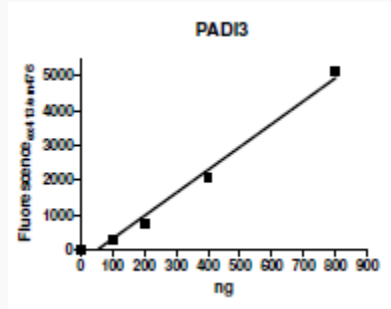
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**Function**

calcium ion binding; protein-arginine deiminase activity



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