

## Active Recombinant Human PADI2, Flag-tagged

Cat. No. PADI2-187H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human PADI2(1-665(end)), fused with C-terminal FLAG-tag, was expressed in a Baculovirus infected Sf9 cell expression system.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>ProteinLength</b>	1-665 a.a.
<b>Description</b>	<p>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.</p>
<b>Form</b>	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 80 ng/μFLAG peptide, 3 mM DTT, and 20% glycerol.
<b>Bio-activity</b>	≥19 pmole/min/μg.

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<b>Molecular Mass</b>	77 kDa
<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>	PADI2 peptidyl arginine deiminase, type II [ Homo sapiens (human) ]
<b>Official Symbol</b>	PADI2
<b>Synonyms</b>	PADI2; PAD2; PDI2; PAD-H19; protein-arginine deiminase type-2; protein-arginine deiminase type II; NP_031391.2; EC 3.5.3.15; peptidyl arginine deiminase, type II
<b>Gene ID</b>	11240
<b>mRNA Refseq</b>	NM_007365
<b>Protein Refseq</b>	NP_031391
<b>MIM</b>	607935
<b>UniProt ID</b>	Q9Y2J8
<b>Chromosome Location</b>	1p36.13
<b>Pathway</b>	protein citrullination

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**Function**

calcium ion binding; estrogen receptor binding; protein-arginine deiminase activity

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