

Active Recombinant Human PADI2 Protein, His-tagged

Cat. No. PADI2-102H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active recombinant N-terminal His-tagged human PADI2 protein was isolated from a baculovirus overexpression system.
Species	Human
Source	Insect Cells
Description	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.
Bio-activity	≥500 U/mg
Molecular Mass	77.32 kDa
Purity	≥90% as determined by SDS-PAGE
Unit Definition	One unit is defined as the amount of enzyme required to produce 1 nmol of NH ₄ ⁺ per

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minute at 37 centigrade in 50 mM HEPES, pH 7.7, containing 10 mM calcium chloride, 5 mM DTT, and 5 mM N- α -Benzoyl-L-Arginineethyl ester (BAEE).

Stability

≥ 6 months

Storage

At -80 centigrade.

Storage Buffer

50 mM HEPES, pH 8.0, with 200 mM NaCl, 1 mM DTT and 10% glycerol

GENE INFORMATION

Gene Name

PADI2 peptidyl arginine deiminase 2 [Homo sapiens (human)]

Official Symbol

PADI2

Synonyms

PADI2; peptidyl arginine deiminase 2; PAD2; PDI2; PAD-H19; protein-arginine deiminase type-2; peptidyl arginine deiminase, type II; protein-arginine deiminase type II; EC 3.5.3.15

Gene ID

11240

mRNA Refseq

NM_007365

Protein Refseq

NP_031391

MIM

607935

UniProt ID

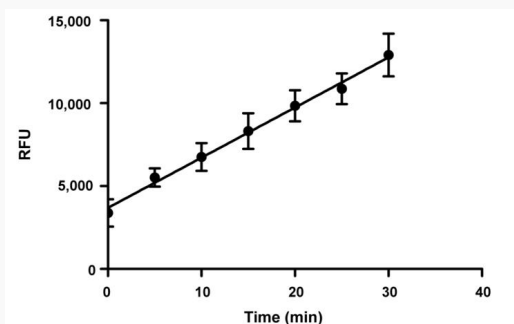
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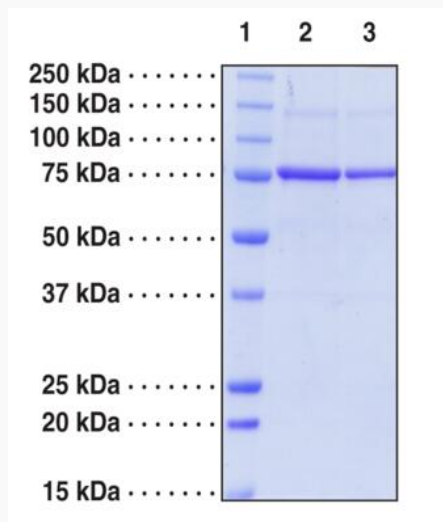
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PAD2 Activity with 5 mM BAEE



SDS-PAGE analysis of PAD2

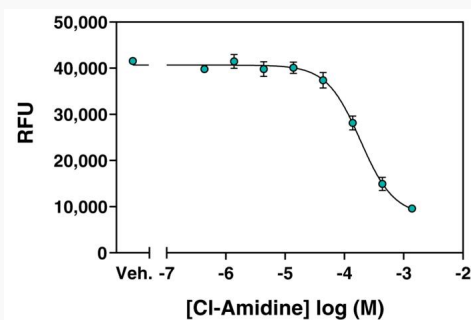


Lane 1: MW Markers

Lane 2: PAD2 (5 µg)

Lane 3: PAD2 (2 µg)

**Inhibition of human
recombinant PAD2
by CI-Amidine**



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