

**Datasheet for 009-001-S73S****PAD1 protein-GST fusion****Overview**

<b>Description:</b>	PAD1 recombinant protein-GST fusion protein - 009-001-S73S
<b>Item No.:</b>	009-001-S73S
<b>Size:</b>	20 µg
<b>Origin:</b>	Human
<b>Expressed in:</b>	Sf9 cells

**Product Details**

<b>Background:</b>	PAD1 is 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. PAD1 is a component of the 26S proteasome, a multiprotein complex that degrades proteins targeted for destruction by the ubiquitin pathway. The overexpression of PAD1 induced a distinctive pattern of multidrug resistance in mammalian cells and moderate resistance to ultraviolet light (1). PAD1 is also responsible for substrate deubiquitination during proteasomal degradation (2). PAD1 Protein is ideal for investigators involved in Signaling Proteins, Arginine Deiminase Proteins, and Inflammation research.
<b>Synonyms:</b>	HPAD10, PADI1, PDI, PDI1, Protein-arginine deiminase type-1, EC 3.5.3.15, Peptidylarginine deiminase I, Protein-arginine deiminase type I
<b>Species of Origin:</b>	Human
<b>Expressed in:</b>	Sf9 cells
<b>Type:</b>	Recombinant Protein

**Target Details**

<b>Gene Name:</b>	PADI1
<b>Purity/Specificity:</b>	Recombinant full-length human PAD1 was expressed by baculovirus in Sf9 insect cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >95% by densitometry.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">NCBI - NM_013358</a></li></ul>

## Application Details

<b>Application Note:</b>	PAD1 Protein is stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol. PAD1 Protein is suitable for use in Western Blot. Expect a band approximately ~95kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>WB:</b>	User Optimized

## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	0.1 µg/µL
<b>Buffer:</b>	See application note.

## Shipping & Handling

<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Disclaimer

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