

Datasheet for 009-001-S76S**PAD4 protein-GST fusion****Overview**

Description:	PAD4 recombinant protein-GST fusion protein - 009-001-S76S
Item No.:	009-001-S76S
Size:	20 µg
Origin:	Human
Expressed in:	Sf9 cells

Product Details

Background:	PAD4 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 (1). PAD4 is essential for antibacterial innate immunity mediated by neutrophil extracellular traps (NETs) (2). PAD4 play a role in granulocyte and macrophage development leading to inflammation and immune response. PAD4 also mediates the gene expression by regulating arginine methylation and citrullination in histones(3). PAD4 Protein is ideal for investigators involved in Signaling Proteins, Arginine Deiminase Proteins, and Inflammation research.
Synonyms:	PADI4, PAD, PDI4, PDI5, Protein-arginine deiminase type-4, EC 3.5.3.15, HL-60 PAD, Peptidylarginine deiminase IV, Protein-arginine deiminase type IV
Species of Origin:	Human
Expressed in:	Sf9 cells
Type:	Recombinant Protein

Target Details

Gene Name:	PADI4
Purity/Specificity:	Recombinant full-length human PAD4 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.
Relevant Links:	• NCBI - BC025718

Application Details

Application Note:	PAD4 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. PAD4 Protein is suitable for use in Western Blot. Expect a band approximately ~96kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	User Optimized

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.1 µg/µL by UV absorbance at 280 nm
Buffer:	See application note.

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.

