

**Datasheet for 010-001-S74S****PAD2 protein-GST fusion****Overview**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| <b>Description:</b>  | PAD2 recombinant protein-GST fusion protein - 010-001-S74S |
| <b>Item No.:</b>     | 010-001-S74S                                               |
| <b>Size:</b>         | 20 µg                                                      |
| <b>Reactivity:</b>   | Mus musculus (Mouse)                                       |
| <b>Origin:</b>       | Mouse                                                      |
| <b>Expressed in:</b> | Sf9 cells                                                  |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Background:</b>        | PAD2 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. PAD2 has peptidylarginine deiminase activity against synthetic substrates (1). PAD2 is mainly expressed in the central nervous system, skeletal muscle, spinal cord, cerebrum, cerebellum, and submaxillary gland (2). PAD2 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. PAD2 Protein is ideal for investigators involved in Signaling Proteins, Arginine Deiminase Proteins, and Inflammation research. |
| <b>Synonyms:</b>          | PADI2, mKIAA0994, Protein-arginine deiminase type-2, EC 3.5.3.15, Peptidylarginine deiminase II, Protein-arginine deiminase type II                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Species of Origin:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Expressed in:</b>      | Sf9 cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Type:</b>              | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

**Target Details**

|                    |                      |
|--------------------|----------------------|
| <b>Gene Name:</b>  | Padi2                |
| <b>Reactivity:</b> | Mus musculus (Mouse) |

|                            |                                                                                                                                                                                                         |
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| <b>Purity/Specificity:</b> | Recombinant full-length mouse PAD2 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 - BC049947</a></li></ul>                                                                                                                       |

## Application Details

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| <b>Application Note:</b> | PAD2 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. PAD2 Protein is suitable for use in Western Blot. Expect a band approximately ~99kDa 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

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.