

**Datasheet for 009-001-171S****p21CIP1 protein-GST fusion****Overview**

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|----------------------|---------------------------------------------------------------|
| <b>Description:</b>  | p21CIP1 recombinant protein-GST fusion protein - 009-001-171S |
| <b>Item No.:</b>     | 009-001-171S                                                  |
| <b>Size:</b>         | 20 µg                                                         |
| <b>Origin:</b>       | Human                                                         |
| <b>Expressed in:</b> | E. coli                                                       |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <b>Background:</b>        | CIP 1 (Cyclin-Dependent Kinase Inhibitor 1A) regulates cell cycle progression, terminal differentiation, and apoptosis (1). CIP1 was shown to be induced by p53 and to be a potent inhibitor of cyclin-dependent kinase (CDK) activity. DNA damage leads to increased expression of CIP1 in cyclin E-containing complexes and to an associated decrease in cyclin-dependent kinase activity. CIP1 is a critical downstream effector in the p53-specific pathway of growth control in mammalian cells (2). p21CIP1 Protein is ideal for investigators involved in Signaling Proteins, Cell Cycle Proteins, Cancer, and Cell Cycle research. |
| <b>Synonyms:</b>          | CDKN1A, P21, SDI1, WAF1, CAP20, CDKN1, MDA-6, Cyclin-dependent kinase inhibitor 1, CDK-interacting protein 1, Melanoma differentiation-associated protein 6, MDA-6, p21                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Species of Origin:</b> | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Expressed in:</b>      | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Type:</b>              | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

**Target Details**

|                            |                                                                                                                                                                                          |
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| <b>Gene Name:</b>          | CDKN1A                                                                                                                                                                                   |
| <b>Purity/Specificity:</b> | Recombinant full-length human p21CIP1 was expressed in E. coli cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >80% by densitometry. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">NCBI - NM_000389</a></li></ul>                                                                                                       |

## Application Details

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| <b>Application Note:</b> | p21CIP1 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. p21CIP1 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately ~46kDa 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>  | 0.2 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.

