

**Datasheet for 009-001-U58S****VRK3 protein-GST fusion****Overview**

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| <b>Description:</b>  | VRK3 recombinant protein-GST fusion protein - 009-001-U58S |
| <b>Item No.:</b>     | 009-001-U58S                                               |
| <b>Size:</b>         | 20 µg                                                      |
| <b>Reactivity:</b>   | H. sapiens (Human)                                         |
| <b>Origin:</b>       | Human                                                      |
| <b>Expressed in:</b> | Sf9 cells                                                  |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <b>Background:</b>        | VRK3 is a member of the vaccinia-related kinase (VRK) family of serine/threonine protein kinases which has substitutions at several residues within the ATP binding motifs that in other kinases have been shown to be required for catalysis. Profound changes to the active site region underlie the loss of catalytic activity of VRK3 since it cannot bind ATP because of residue substitutions in the binding pocket (1). VRK3 is widely expressed in human tissues and the protein localizes to the nucleus. VRK3 regulates several transcription factors, nuclear envelope assembly, and chromatin condensation and is also required for cell cycle progression (2). VRK3 Protein is ideal for investigators involved in Signaling Proteins, Cellular Proteins, Apoptosis/Autophagy, Cancer, ERK/MAPK Pathway, JNK/SAPK Pathway, p38 Pathway, and Ser/Thr Kinases research. |
| <b>Synonyms:</b>          | Inactive serine/threonine-protein kinase VRK3, Serine/threonine-protein pseudokinase VRK3, Vaccinia-related kinase 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species of Origin:</b> | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Expressed in:</b>      | Sf9 cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Type:</b>              | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Target Details**

|                    |                    |
|--------------------|--------------------|
| <b>Gene Name:</b>  | VRK3               |
| <b>Reactivity:</b> | H. sapiens (Human) |

|                            |                                                                                                                                                                                                         |
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| <b>Purity/Specificity:</b> | Recombinant full-length human VRK3 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_016440</a></li></ul>                                                                                                                      |

## Application Details

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| <b>Application Note:</b> | VRK3 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. VRK3 Protein is suitable for use in Western Blot. Expect a band approximately ~80kDa 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.