

## Datasheet for 009-001-R35S

**4EBP1 protein-HIS Epitope****Overview**

|                      |                                                      |
|----------------------|------------------------------------------------------|
| <b>Description:</b>  | 4EBP1 recombinant protein-HIS Epitope - 009-001-R35S |
| <b>Item No.:</b>     | 009-001-R35S                                         |
| <b>Size:</b>         | 20 µg                                                |
| <b>Origin:</b>       | Human                                                |
| <b>Expressed in:</b> | Sf9 cells                                            |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Background:</b>        | 4EBP1 is a member of a family of translation repressor proteins that directly interact with eukaryotic translation initiation factor 4E (EIF4E). Interaction of 4EBP1 with EIF4E inhibits the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs thereby leading to repression of translation. Insulin treatment of adipose cells increases the phosphorylation of 4EBP1 and leads to reduced interaction of 4EBP1 with EIF4E (1). 4EBP1 is expressed in most tissues, with highest levels seen in adipose tissue, pancreas, and skeletal muscle (2). 4EBP1 Protein is ideal for investigators involved in Signaling Reagents, Protein Substrates, AKT/PKB Pathway, Angiogenesis, Cancer, and Metabolic Disorder research. |
| <b>Synonyms:</b>          | BP-1, EIF4EBP1, PHAS-I, MGC4316, Eukaryotic translation initiation factor 4E-binding protein 1, 4E-BP1, eIF4E-binding protein 1, Phosphorylated heat- and acid-stable protein regulated by insulin 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Species of Origin:</b> | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Expressed in:</b>      | Sf9 cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Type:</b>              | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Target Details**

|                            |                                                                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | EIF4EBP1                                                                                                                                                             |
| <b>Purity/Specificity:</b> | Recombinant full-length human 4EBP1 Protein was expressed in Sf9 insect cells using an N-terminal his epitope. The purity was determined to be >85% by densitometry. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">NCBI - NM_004095</a></li></ul>                                                                                   |

## Application Details

|                          |                                                                                                                                                                                                                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application Note:</b> | 4EBP1 Protein is stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol. 4EBP1 Protein is suitable for use in Western Blot. Expect a band approximately ~ 18kDa 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.

