

Datasheet for 009-001-S25S**IRS1 protein-GST fusion****Overview**

Description:	IRS1 recombinant protein-GST fusion protein - 009-001-S25S
Item No.:	009-001-S25S
Size:	20 µg
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	IRS1 is the substrate for the insulin tyrosine kinase receptor and is found in a variety of insulin-responsive cells and tissues. IRS1 protein has no intrinsic enzymatic activity but acts as a docking protein, via the SH2 domains, for mediating the insulin downstream signaling events. IRS1 has been shown to associate with the 14-3-3 family of proteins and this could play a role in the regulation of insulin sensitivity by interrupting the association between the insulin receptor and IRS1 (1). IRS1 may be associated with colorectal cancer and diet and related factors may affect the risk by modifying plasma insulin levels. Thus, the inter-individual variation in insulin signaling mediated by IRS1 may play a plausible role in the development of colorectal cancer (2). IRS1 Protein is ideal for investigators involved in Signaling Reagents, Protein Substrates, AKT/PKB Pathway, Cancer, Cellular Stress, and ERK/MAPK Pathway research.
Synonyms:	Insulin Receptor Substrate 1, HIRS-1
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein

Target Details

Gene Name:	IRS1
Purity/Specificity:	Recombinant human IRS1 (1-355) was expressed in E. coli cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >90% by densitometry.
Relevant Links:	• NCBI - NM_005544

Application Details

Application Note:	IRS1 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. IRS1 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately ~65kDa 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:	0.2 µg/µL
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.

