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Datasheet for 009-001-R31S

14-3-3 sigma protein-GST fusion

Overview

Description:	14-3-3 sigma recombinant protein-GST fusion protein - 009-001-R31S
Item No.:	009-001-R31S
Size:	20 µg
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	14-3-3σ or stratifin is a protein that is strongly induced by gamma irradiation and other DNA-damaging agents (1). The induction of 14-3-3σ is mediated by a p53 responsive element. Exogenous introduction of 14-3-3σ into cycling cells results in a G2 cell cycle arrest (2). Knockout of 14-3-3σ in cells showed that the cells are unable to maintain cell cycle arrest after DNA damage. The 14-3-3σ -/- cells die as they enter mitosis. This process is associated with a failure of the 14-3-3σ -deficient cells to sequester the proteins that initiate mitosis and prevent them from entering the nucleus. Thus, 14-3-3σ plays an important role in maintaining the G2 checkpoint in cells and preventing mitotic death. 14-3-3σ Protein is ideal for investigators involved in Cell Stress& Chaperone Proteins, AKT/PKB Pathway, Cancer, Cell Cycle, Cellular Stress, ERK/MAPK Pathway, Neurobiology, PKA/PKC Pathway, and WNT Signaling research.
Synonyms:	14-3-3 sigma, SFN, stratifin, YWHAS
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein

Target Details

Gene Name:	YWHAS
Purity/Specificity:	Recombinant full-length human 14-3-3σ 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_006826

Application Details

Application Note:	14-3-3σ 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. 14-3-3σ Protein is suitable for use in Western Blot. Expect a band approximately ~ 51kDa 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.

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