

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:	14-3-3 σ 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. 14-3-3 σ 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 $\mu\text{g}/\mu\text{L}$
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

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