

Datasheet for ABIN6700571

14-3-3 sigma/SFN Protein



Overview

Quantity:	20 μg
Target:	14-3-3 sigma/SFN (SFN)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	Western Blotting (WB)
Product Details	
Purpose:	14-3-3 sigma recombinant protein
Purification:	Recombinant full-length human 14-3-3σ was expressed in E. coli cells. The purity was
	determined to be >95% by densitometry.
Purity:	>95%
Target Details	
Target:	14-3-3 sigma/SFN (SFN)
Alternative Name:	YWHAS (SFN Products)
Background:	Synonyms: 14-3-3 sigma, SFN, stratifin, YWHAS
	Background: $14\text{-}3\text{-}3\sigma$ or stratifin is a protein that is strongly induced by gamma irradiation and
	other DNA-damaging agents (1). The induction of 14-3-3 σ is mediated by a p53 responsive
	element. Exogenous introduction of 14-3-3 σ into cycling cells results in a G2 cell cycle arrest
	(2). Knockout of 14-3-3 σ in cells showed that the cells are unable to maintain cell cycle arrest

after DNA damage. The 14-3-3 σ -/- cells die as they enter mitosis. This process is associated with a failure of the 14-3-3 σ -deficient cells to sequester the proteins that initiate mitosis and prevent them from entering the nucleus. Thus, 14-3-3 σ plays an important role in maintaining the G2 checkpoint in cells and preventing mitotic death. 14-3-3 σ 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.

NCBI Accession:

NM_006826

Pathways:

p53 Signaling, Myometrial Relaxation and Contraction

Application Details

Application Notes:

Western_Blot_Dilution: User Optimized

Application_Note: $14-3-3\sigma$ Protein is suitable for use in Western Blot. Expect a band approximately ~ 29 kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.

Restrictions:

For Research Use only

Handling

Format:	Liquid
Concentration:	0.2 μg/μL
Buffer:	14-3-3σ Protein is stored in 50 mM Tris-HCl, pH 7.5, 50 mM NaCl, 0.25 mM DTT, 0.1 mM PMSF, 25 % glycerol.
Storage:	-80 °C
Storage Comment:	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.
Expiry Date:	12 months