

# Datasheet for ABIN6699925

# **HSP27 Protein (GST tag)**



### Overview

Quantity:	20 μg
Target:	HSP27 (HSPB1)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HSP27 protein is labelled with GST tag.
Application:	Western Blotting (WB)

## **Product Details**

Purpose:	HSP27 recombinant protein-GST fusion protein
Purification:	Recombinant full-length human HSP27 expressed in E. coli cells using an N-Terminal Glutathione-S-Transferase fusion protein. The purity was determined to be >80% by densitometry.
Purity:	>80%

# **Target Details**

Target:	HSP27 (HSPB1)
Alternative Name:	HSPB1 (HSPB1 Products)
Background:	Synonyms: CMT2F, HSPB1, HSP28, Hsp25, HS.76067, DKFZp586P1322, Heat shock protein beta-1, HspB1, 28 kDa heat shock protein, Estrogen-regulated 24 kDa protein, Heat shock 27 kDa protein, HSP 27, Stress-responsive protein

Background: HSP27 is a member of heat shock proteins (HSPs) which are synthesized in cells in response to heat shock and other metabolic stresses and provide a transient state of thermotolerance. HSP27 plays a major role in the increased thermal resistance acquired by cells after exposure to HSP inducers (1). The level of HSP27 phosphorylation is significantly elevated after exposure of cells to heat shock, sodium arsenite, IL-1 and TNF-a. MAPKAPK2 and MAPKAPK3 are both activated by these conditions and can phosphorylate HSP27 on serine residues (2). HSP27 Protein is ideal for investigators involved in Signaling Proteins, Cell Stress & Chaperone Proteins, Cancer, Cellular Stress, and p38 Pathway research.

NCBI Accession:

NM\_001540

Pathways:

MAPK Signaling, Regulation of Actin Filament Polymerization, Signaling Events mediated by VEGFR1 and VEGFR2, Negative Regulation of intrinsic apoptotic Signaling, VEGF Signaling

# **Application Details**

Application Notes:

Western\_Blot\_Dilution: User Optimized

Other: Kinase Assay-User Optimized

Application\_Note: HSP27 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately  $\sim$ 52 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 mg/mL
Buffer:	HSP27 Protein is stored in 50 mM Tris-HCl, pH 7.5, 150 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