

Product Information

HSP70, GST-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5255**
Storage Temperature -70°C

Synonyms: HSPA1A, HSP70-1, HSP72, HSPA1, HSPA1B, DAQB-147D11.1

Product Description

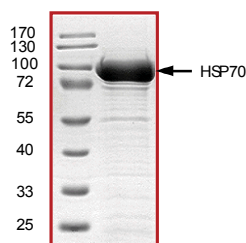
HSP70 is a member of the heat shock protein family and is synthesized by cells of many organisms in response to stress.¹ HSP70 is found mostly, but not exclusively, in the nucleus of unstressed cells. For several hours after a short heat shock, it is strongly concentrated in nucleoli.² Nucleoli are transiently damaged by such a heat shock. Their morphology changes, and assembly and export of ribosomes are blocked for several hours. HSP70 helps to stabilize the morphological changes of the nucleoli.

Recombinant full-length human HSP70 was expressed in *E. coli* cells using an N-terminal GST-tag. The gene accession number is NM_005345. It is supplied in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~96 kDa

The enzymatic activity of this product has not been determined.

Figure 1.
SDS-PAGE Gel of Typical Lot:
 $\geq 70\%$ (SDS-PAGE, densitometry)



Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70°C is recommended. After opening, aliquot into smaller quantities and store at -70°C . Avoid repeated handling and multiple freeze/thaw cycles.

References

1. Moran, L.A. et al., The major heat-shock protein (hsp70) gene family: related sequences in mouse, *Drosophila*, and yeast. *Can. J. Biochem. Cell Biol.*, **61**(6), 488-99 (1983).
2. Pelham, H.R., Hsp70 accelerates the recovery of nucleolar morphology after heat shock. *EMBO J.*, **3**(13), 3095-100 (1984).

RC,MAM 10/12-1