



## Product Datasheet

<b>Product Name</b>	DnaK Human Recombinant, His Tag
<b>Cata No</b>	CB500772
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Heat shock 70 kDa protein, heat shock 70kDa protein 1A, HSP70.1, HSP70-1/HSP70-2, HSPA1A, HSPA1, HSPA1B, HSP72, HSP70I, HSP70-1, FLJ54303, FLJ54370, FLJ54392, FLJ54408, FLJ75127, HSP70-1A.

### Description

HSP70 is a human heat shock protein. HSP-70 is an important part of the cell's machinery for protein folding, and help to protect cells from stress. In most species, there are many proteins that belong to the HSP70 family. Some of these are only expressed under stress conditions, while some are present in cells under normal growth conditions and are not heat-inducible. They can be found in different cellular compartments (nuclear, cytosolic, mitochondrial, endoplasmic reticulum, etc...). HSP 70kD produced in E.Coli is a single, non-glycosylated polypeptide chain containing 661 amino acids fused to His-tag at N-terminus and having a total Mw of 72.2 kDa.

### Physical Appearance

Sterile Filtered colorless solution.

### Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

The Heat Shock Protein 70kD contains 20mM Tris pH7.5 and 2mM DTT at a concentration of 1mg/ml. Heat Shock Protein 70kD although stable at 4°C for 1 week, should be stored desiccated below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Sequence

**MGSSHHHHH SSGLVPRGSH** MAKAAAIGID  
LGTTYSCVGV FQHGKVEIIA  
NDQGNRTTPSYVAFTDTERL IGDAAKNQVA  
LNPQNTVFDA KRLIGRKFQD PVVQSDMKHW  
PFQVINDGDKPKVQVSYKGD TKAFYPEEIS  
SMVLTKMKEI AEAYLGYPT NAVITVPAYF  
NDSQRQATKDAGVIAGLNLV RIINEPTAAA  
IAYGLDRTGK GERNLIFDL GGGTFDVSIL  
TIDDGIFEVKATAGDTHLGG EDFDNRLVNH  
FVEEFKRKHK KDISQNKRAV RRLRTACERA  
KRTLSSSTQA SLEIDSLFEG IDFYTSITRA  
RFEELCSDLF RSTLEPVEKA LRDAKLDKQA  
IHDLVLVGGS TRIPKVQKLL QDFFNGRDLN  
KSINPDEAVA YGAAVQAAIL MGDKSENVQD  
LLLLDVAPLSLGLLETAGGVM TALIKRNSTI  
PTKQTQIFTT YSDNQPGVLI QVYEGERAMT  
KDNLLGRFELSGIPPAPRG VPQIEVTFDI  
DANGILNVTA TDKSTGKANK ITITNDKGR  
SKEEIERMVQEAKEYKAEDE VQRERVSANK  
ALESYAFNMK SAVEDEGLKG KISEADKKKV  
LDKCQEVISW  
LDANTLAEKD EFEHKRKELE QVCNPIISGL  
YQGAGGPGPG GFGAQGPKGG SGSGPTIEEVD

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