

Product datasheet for **TP300270M**

HSP70-1A (HSPA1A) (NM_005345) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human heat shock 70kDa protein 1A (HSPA1A), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC200270 representing NM_005345 Red=Cloning site Green=Tags(s)

MAKAAAIGIDLGTTYSCVGVFQHGKVEIANDQGNRTTPSYVAFTDTERLIGDAAKNQVALNPQNTVFDA
KRLIGRKFGDPVWQSDMKHWPFQVINDGDKPKVQVSYKGETKAFYP EEISSMVLTKMKEIAEAYLGYPVT
NAVITVPAYFNDSQRQATKDAGVIAGLNLVRIINEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSIL
TIDDGIFEVKATAGDTHLGGEDFDNRLVNHFVEEFKRKHKKDISQNKRAVRRRLTACERAKRTLSSSTQA
SLEIDSLFEGIDFYTSITRARFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLL
QDFFNDRDLNKSINPDEAVAYGAAVQAAILMGDKSENVQDLLLDVAPLSLGLLETAGGVMTALIKRNSTI
PTKQTQIFTTYSDNQPGVLIQVYEGERAMTKDNNLLGRFELSGIPPAPRGVQPQIEVTFDIDANGILNVTA
TDKSTGKANKITITNDKGRLSKEEIERMVQEA EKYKA EDEVQRERVS AKNALESYAFNMKSAVEDEGLKG
KISEADKKKVLDKCQEVISWLDANTLAEKDEFEHKRKELEQVCNPIISGLYQGAGGPGGGFGAQGPKGG
SGSGPTIEEVD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

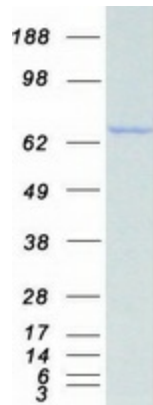
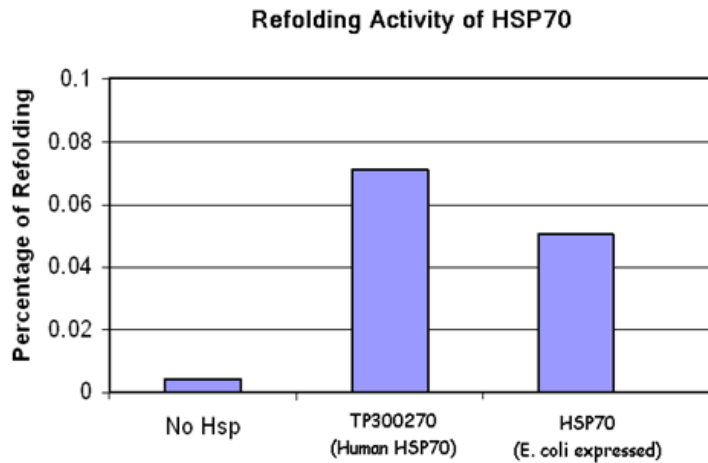
Tag:	C-Myc/DDK
Predicted MW:	69.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	Higher specific activity than E. coli derived HSP70: Origene human recombinant Hsp70 (TP300270) was compared side-by-side with E. coli derived Hsp70 in a firefly luciferase refolding assay. Percentage of refolding is relative to an identical load of non-denatured luciferase in the reaction. The human cell produced Hsp70 is approximately 30% more active than the bacterial produced Hsp70



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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_005336</u>
Locus ID:	3303
UniProt ID:	<u>P08107</u> , <u>P0DMV8</u> , <u>P0DMV9</u> , <u>A8K5I0</u> , <u>B3KTT5</u>
RefSeq Size:	2383
Cytogenetics:	6p21.33
RefSeq ORF:	1923
Synonyms:	HEL-S-103; HSP70-1; HSP70-1A; HSP70-2; HSP70.1; HSP70.2; HSP70I; HSP72; HSPA1
Summary:	This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq, Jul 2008]
Protein Pathways:	Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Prion diseases, Spliceosome

Product images:



Coomassie blue staining of purified HSPA1A protein (Cat# [TP300270]). The protein was produced from HEK293T cells transfected with HSPA1A cDNA clone (Cat# [RC200270]) using MegaTran 2.0 (Cat# [TT210002]).