

Recombinant human HSP70/HSPA1A protein

Catalog Number: HSP0603

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-641aa

UniProt No.

P0DMV8

NCBI Accession No.

NP_005336.3

Alternative Names

Heat shock 70kDa protein 1A, Heat shock protein family A member 1A, HSP70, HSP70.1, HSP70-1/HSP70-2, HSPA1, HSPA1A, HSPA1B

PRODUCT SPECIFICATION

Molecular Weight

72.2 kDa (661aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 2mM DTT

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Hsp70 is a human heat shock protein. Hsp70 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

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conditions and are not heat-inducible. They can be found in different cellular compartments (nuclear, cytosolic, mitochondrial, endoplasmic reticulum, etc...). Recombinant human Hsp70, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

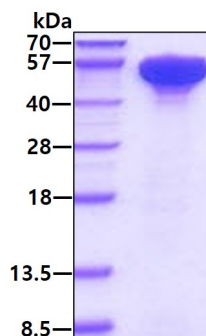
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AEAYLGYPVT NAVITVPAYF NDSQRQATKD AGVIAGLNVL RIINEPTAAA IAYGLDRTGK GERNVLIFDL GGGTFDVSIL
TIDDGIFEVK ATAGDTHLGG EDFDNRLVNH FVEEFKRKHK KDISQNKRAV RRLRTACERA KRTLSSSTQA SLEIDSLFEG
IDFYTSITRA RFEELCSDLF RSTLEPVEKA LRDAKLDKAQ IHDLVLVGGS TRIPKVQKLL QDFFNGRDLN KSINPDEAVA
YGAAVQAAIL MGDKSENVQD LLLLDVAPLS LGLETAGGVM TALIKRNSTI PTKQTQIFTT YSDNQPGVLI QVYEGERAMT
KDNNLLGRFE LSGIPPAPRG VPQIEVTFDI DANGILNVTA TDKSTGKANK ITITNDKGRL SKEEIERMVQ EAEKYKAEDE
VQRERSAKN ALESYAFNMK SAVEDEGLKG KISEADKKKV LDKCQEVIW LDANTLAEKD EFEHKRKELE QVCNPIISGL
YQGAGGPGPG GFGAQGPKGG SGSGPTIEEV D

General References

Gething M-J, et al. (1992). Nature. 355. 33-45
Lewis MJ, et al. EMBO J. (1985) 4:3137-3143

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.