

PRODUCT INFORMATION



Hsc70 (human recombinant)

Item No. 22737

Overview and Properties

Synonyms: Constitutive Heat Shock Protein 70, EC 3.6.3.51, Heat Shock 70 kDa Protein 8, Heat Shock Cognate 71 kDa Protein, Hsc54 Protein, Hsc71 Protein, Hsc73 Protein, Hsp71 Protein, Hsp74 Protein, HspA10 Protein, HspA8 Protein, LAP1 Protein, Lipopolysaccharide-associated Protein 1, NIP71 Protein

Source: N-terminal Histidine-tagged Hsc70 (human recombinant) purified from *E. coli*

Amino acids: 2-646 (full length)

Uniprot No.: P11142

Molecular Weight: 73.03 kDa

Storage: -80°C (as supplied)

Stability: ≥1 year

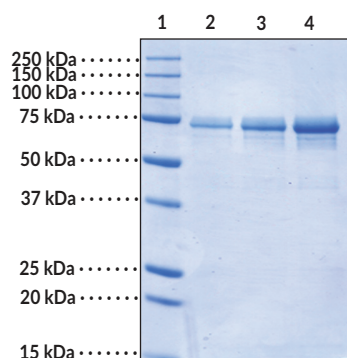
Purity: *batch specific* (estimated by SDS-PAGE)

Supplied in: *batch specific* Protein

Concentration: *batch specific* mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: Hsc70 (1 µg)
Lane 3: Hsc70 (2 µg)
Lane 4: Hsc70 (4 µg)

Representative gel image shown; actual purity may vary between batches but protein will be ≥85% pure.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 08/18/2017

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Hsc70 is a chaperone from the Hsp70 chaperone family encoded by the HspA8 gene, that shares 85% sequence identity to Hsp70 (encoded by HspA1A gene), and is one of the constitutively expressed members from this family.¹ Hsc70 acts as the main housekeeping protein but is also involved in many functions such as ubiquitin-proteasome degradation pathway and transporting cytoplasmic proteins into the nucleus.^{2,3} Hsc70 also garnered interests as a potential therapeutic target since promoting accumulation of unfolded proteins can serve as a potential strategy to cause tumor death.⁴

References

1. Stricher, F., Macri, C., and Muller, S. HSPA8/HSC70 chaperone protein: Structure, function, and chemical targeting. *Autophagy* **9(12)**, 1937-1954 (2013).
2. Bercovich, B., Stancovski, I., Mayer, A., *et al.* Ubiquitin-dependent degradation of certain protein substrates *in vitro* requires the molecular chaperone Hsc70. *J. Biol. Chem.* **272(14)**, 9002-9010 (1997).
3. Dang, C.V. and Lee, W.M. Nuclear and nucleolar targeting sequences of *c-erb-A*, *c-myb*, *N-myc*, *p53*, *HSP70*, and *HIV tat* proteins. *J. Biol. Chem.* **264(30)**, 18019-18023 (1989).
4. Leu, J.I., Pimkina, J., Frank, A., *et al.* A small molecule inhibitor of inducible heat shock protein 70. *Molecular Cell* **36(1)**, 15-27 (2009).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM