

**HSP40 Antibody**  
**Catalog # ASM10351****Specification**

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**HSP40 Antibody - Product Information**

Application	WB, IP, ICC
Primary Accession	<a href="#">P25685</a>
Other Accession	<a href="#">NP_006136.1</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
<b>Description</b>	
Rabbit Anti-Human HSP40 Polyclonal	

**Target/Specificity**  
Detects ~40kDa.**Other Names**

DnaJ (HSP40) homolog subfamily B member 1 Antibody, DNAJ1 Antibody, DNAJB1 Antibody, HDJ1 Antibody, HSPF1 Antibody

**Immunogen**

Recombinant purified human HSP40

**Purification**

Rabbit Antiserum

Storage -20°C

**Storage Buffer**

Rabbit Antiserum

Shipping Temperature Blue Ice or 4°C

**Certificate of Analysis**

0.5 µg/ml of SPC-100 was sufficient for detection of HSP40 in 20 µg of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

**Cellular Localization**

Cytoplasm | Nucleus

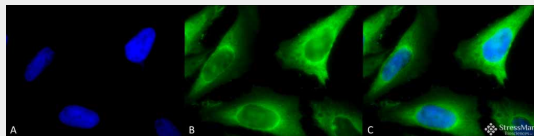
**HSP40 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

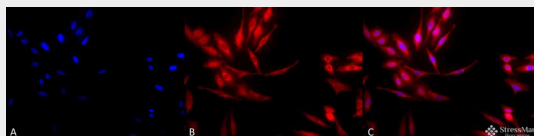
## HSP40 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Hsp40 Polyclonal Antibody (ASM10351). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Hsp40 Polyclonal Antibody (ASM10351) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp40 Antibody. (C) Composite. Heat Shocked at 42°C for 1h.



Western blot analysis of Human HeLa cell lysates showing detection of HSP40 protein using Rabbit Anti-HSP40 Polyclonal Antibody (ASM10351). Primary Antibody: Rabbit Anti-HSP40 Polyclonal Antibody (ASM10351) at 1:1000.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Hsp40 Polyclonal Antibody (ASM10351). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Hsp40 Polyclonal Antibody (ASM10351) at 1:100 for 12 hours at 4°C. Secondary Antibody: APC Goat Anti-Rabbit (red) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp40 Antibody. (C) Composite. Heat Shocked at 42°C for 1h.

## HSP40 Antibody - Background

DnaJ/HSP40 proteins have been preserved throughout evolution and are important for protein

translation, folding, unfolding, translocation, and degradation, primarily by stimulating the ATPase activity of chaperone proteins, HSP70s. Because the ATP hydrolysis is essential for the activity of HSP70s, DnaJ/HSP40 proteins actually determine the activity of HSP70s by stabilizing their interaction with substrate proteins. DnaJ/HSP40 proteins all contain the J domain through which they bind to HSP70s.

HSP40, also known as HDJ1 (6), is a basic mammalian 40kDa heat shock protein which is not only homologous to the bacterial heat shock protein (DnaJ), but also yeast DnaJ-related proteins such as SCJ1, Sec63/Npl1, YDJ1 and SIS1 (2-5). HSP 40 is inducible by stress including heat after which it moves from the cytoplasm to the nucleus and nucleoli; an intracellular pattern similar to HSC70/HSP70, the mammalian homologues of the bacterial heat shock protein, DnaK (2).

### **HSP40 Antibody - References**

1. Melville, M. W. et al. (1997) PNAS USA, 94: 97-102.
2. Hattori, H., Liu, Y-C., Tohnai, I., Ueda, M., Kaneda, T., Kobayashi, T., Tanabe, K., and Ohtsuka, K. (1992) Cell Structure and Function 17: 77-86.
3. Ohtsuka, K. Masuda, A., Nakai, A., and Nagata, K. (1990) Biochem. Biophys. Res. Commun. 166: 642-647.
4. Bardwell, J.C.A., Tilly, K., Craig, E., King, J., Zylicz, M. and Georgopoulos, C. (1986) J. Biol. Chem. 261: 1782-1785.
5. Ohku, M., Tamura, F., Nishimura, S., and Uchida, H. (1986) J. Biol. Chem. 261: 1778-1781.
6. Ohtsuka, K. (1993) Biochem. Biophys. Res. Commun. 197: 235-240.