

# Anti-Hsp40



## TECHNICAL SPECIFICATIONS

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## Rabbit Anti-Hsp40 Polyclonal Antibody Product #: SPA-400

### Immunogen

Rabbits were immunized with recombinant human Hsp40.

### Specificity

This antibody detects a ~40 kDa protein, corresponding to the apparent molecular mass of Hsp40 on SDS-PAGE immunoblots, in samples from human, monkey, mouse, rat, hamster, guinea pig, rabbit, canine, bovine, sheep, pig, chicken, mussel, scallop, beluga, *Xenopus* and fish origins. It does not detect DnaJ in *E.coli* lysates.

### Species Reactivity

human, monkey, mouse, rat, hamster, guinea pig, rabbit, canine, bovine, sheep, pig, chicken, mussel, scallop, beluga, *Xenopus*, fish

### Applications

Certified\*

Cited\*

Applications	Certified*	Cited*
Western Blot (Colorimetric)	1:10,000	
Western Blot (ECL) (11)		1:10,000
Immunoprecipitation (8)	1:100	1:100
Immunocytochemistry (8,11)		1:100-1:400
Immunohistochemistry (10)		Yes

\*These working dilutions are provided as suggestions only. Further dilutions may be possible. Each user should determine the optimal conditions for their own particular experiment.

### Positive Controls

Recombinant Human Hsp40 Protein, Product#: SPP-400  
HeLa Heat Shocked Cell Lysate, Product#: LYC-HL101

### Scientific Background

Hsp40, also known as HDJ1 (9), is a basic mammalian 40kDa heat shock protein which is homologous to the bacterial heat shock protein, DnaJ, and yeast DnaJ-related proteins such as SCJ1, Sec63/Npl1, YDJ1 and SIS1 (1, 2, 3, 4). Like many heat shock proteins, Hsp40 is inducible by heat, transient metals and azetidine carboxylic acid in mammalian and avian cells (2). In heat shocked HeLa cells, Hsp40 translocates rapidly 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 (1). This suggests that Hsp40 colocalizes with Hsp70 and together they repair denatured proteins in the nuclei and nucleoli of heat shocked cells (1). This is analogous to the functions of bacterial DnaJ and DnaK which have been shown to act together in dissociating the bacteriophage lambda protein complexes (5, 6) and monomerizing the Rep A dimer (7).

### References

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Rev: 03/27/06

## CERTIFICATE OF ANALYSIS

# Anti-Hsp40

Product #: SPA-400

**Format:** Whole rabbit serum

**Host:** Rabbit

**Antibody Type:** Polyclonal

**Certification:** A 1:10,000 dilution of SPA-400 was sufficient for detection of Hsp40 in 20µg of HeLa heat shocked cell lysate (product# LYC-HL101) by colorimetric immunoblot analysis using Stressgen's Goat anti-Rabbit IgG:AP (product# SAB-301) as the secondary antibody.

**Note:** Stressgen makes every effort to provide a consistent source of high quality polyclonal antisera. However due to variations inherent in this technology, investigators are urged to purchase sufficient quantities of a specific lot number if an identical antisera is required throughout a study

**STORAGE & SHIPPING:** Store frozen product at or below -20°C. Thawed product may be stored for 2-4 weeks at 4°C. For optimal storage, aliquot to smaller portions and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles. For maximum product recovery, after thawing, centrifuge the product vial before removing cap. Shipped on gel packs.



**FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES:** This product is not to be used for diagnostic nor therapeutic purposes. By accepting this product, the user confirms that it will be used for research purposes only. Stressgen warrants that its products conform to the information published by Stressgen. Purchaser must determine the suitability of the product for their particular use. Please refer to the MSDS for product safety information.

# MATERIAL SAFETY DATA SHEET

## Section 1 - Product Identification and Use

**Product Name:** Rabbit Anti-Hsp40 Polyclonal Antibody **Product#** SPA-400

*This product is sold only for research use by qualified laboratory personnel, and is not to be used as a drug, medical device, food additive, cosmetic, nor household chemical. It is not to be used in diagnostic, therapeutic, consumer, agricultural, nor pesticidal applications.*

Manufacturer's Name: Stressgen Bioreagents Corporation  
Street Address: 350-4243 Glanford Avenue  
City, Prov. Postal Code: Victoria, B.C., CANADA V8Z 4B9  
Fax: (250) 744-2877  
EMERGENCY PHONE: (250) 744-2811

## Section 2 - Hazardous Ingredients

NOT AVAILABLE. We are not aware of any hazards associated with this product or its ingredients, but the chemical, physical, and toxicological properties of this product have not been investigated thoroughly. Observe normal laboratory precautions.

## Section 3 - Physical Data

This product consists of rabbit antiserum shipped on gel packs (dry ice overseas). The physical properties of this product have not been investigated thoroughly.

## Section 4 - Fire and Explosion Hazard

NOT APPLICABLE

## Section 5 - Reactivity Data

NOT APPLICABLE

## Section 6 - Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

## Section 7 - Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

\*\*\*\*\*MULTIPLE COMPONENT SPILL OR LEAK PROCEDURES\*\*\*\*\*

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

## Section 8 - First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

## Section 9 - Preparation

Prepared by: SBC	Phone#: (250) 744-2811	Created: 05/13/05	Modified: 03/27/06
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Stressgen shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.