HSP40/Hdj1 polyclonal antibody

Hsp40/Hdj1 is a cytosolic co-chaperone belonging to the class DnaJ, named after its homolog in *E. coli*. Hsp40 functions in protein folding by binding nascent peptides and unfolded substrates and facilitating substrate interaction with Hsp70. Binding of Hsp40 to Hsp70 increases Hsp70 ATP hydrolysis and substrate binding, which is reversed by the action of nucleotide exchange factors (GrpE in *E. coli*). Repeated cycles of Hsp40/Hsp70 peptide binding and ATP hydrolysis prevent premature folding and aggregation, promoting protein maturation throughout the cell.

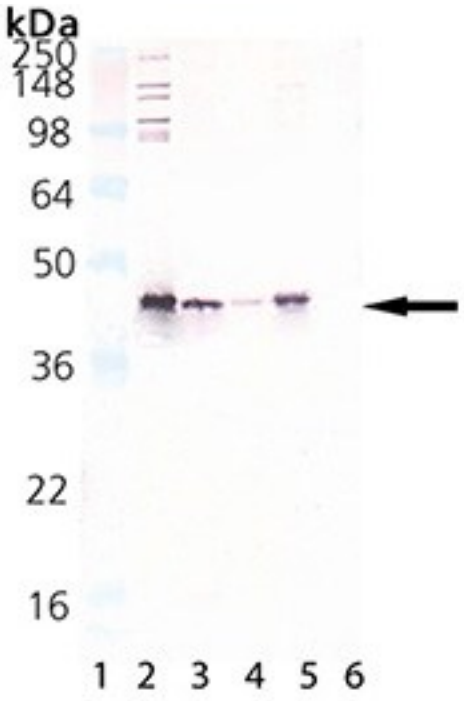
This antibody is covered by our Worry-Free Guarantee.

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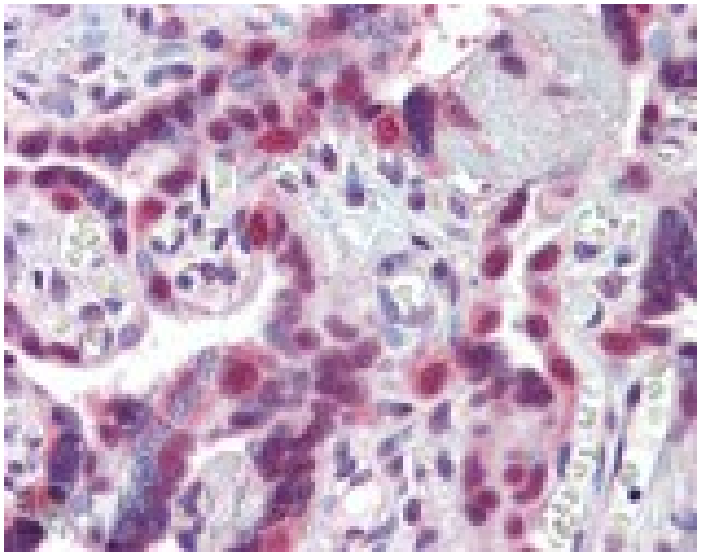
Ordering Information Order Online »

ADI-SPA-400-D	50µg
ADI-SPA-400-F	200µg

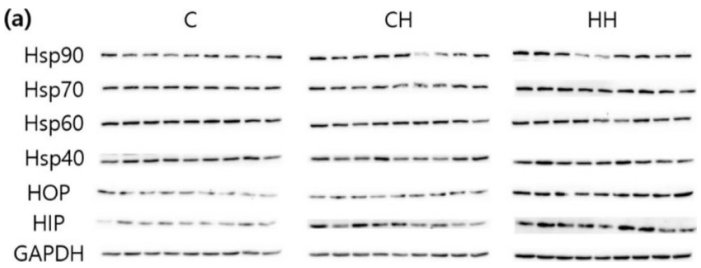
Manuals, SDS & CofA View Online »



Western Blot analysis of HSP40/Hdj1, pAb (Prod. No. SPA-400): Lane 1: M W Marker, Lane 2: HSP40/Hdj1 (human), (recombinant) Protein (Prod. No. SPP-400), Lane 3: HeLa (heat shocked), (cell lysate) (Prod. No. LYC-HL101) , Lane 4: 3T3 (heat shocked), (cell lysate) (Prod. No. LYC-3T101), Lane 5: PC-12, (cell lysate) (Prod. No. LYC-PC100), Lane 6: DnaJ (E. coli), (recombinant) (His-tag) Protein (Prod. No. SPP-640)(Negative Control)

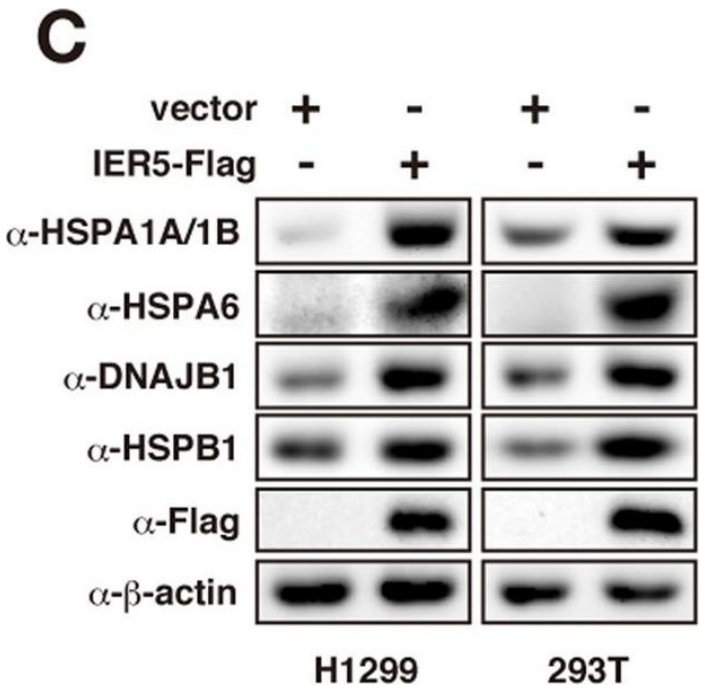


Immunohistochemistry analysis of human placenta tissue stained with HSP40/Hdj1, pAb at 10µg/ml.



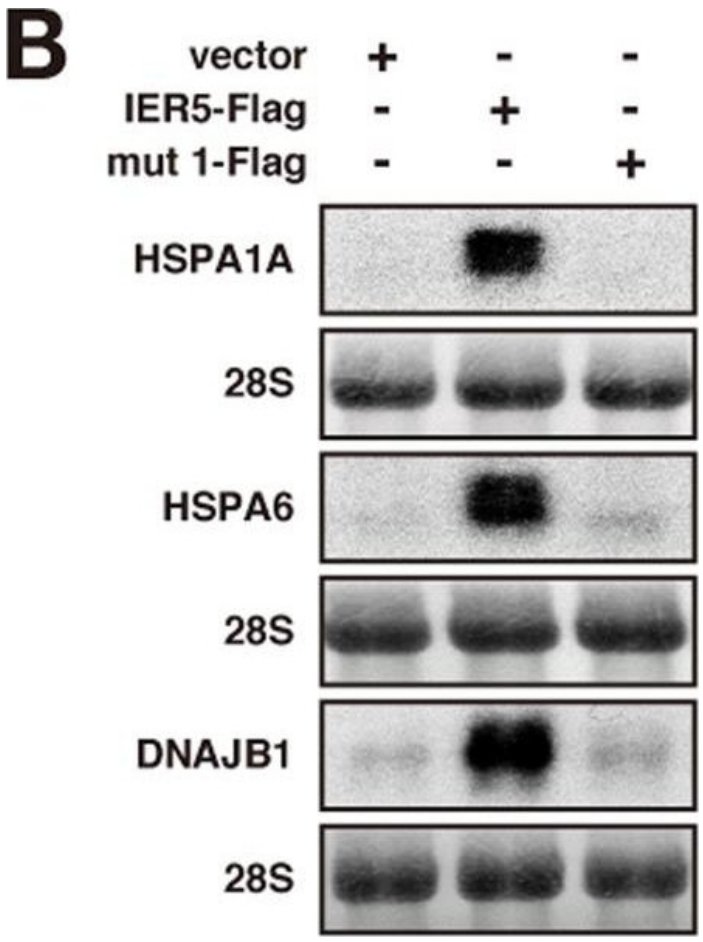
HSPs (heat shock proteins), HOP (hsp70-hsp90 organizing protein), and HIP (hsp70 interacting protein) protein expressions of liver tissue. (a) Bands, each line represents a repetition of each birds; (b) protein expressions level calculated by GAPDH. C, control; CH, chronic heat-stressed broiler; HH, early and chronic heat-stressed broiler. a,b Different superscript letters are significantly different ($p < 0.05$).

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Heat Treatment at an Early Age Has Effects on the Resistance to Chronic Heat Stress on Broilers. *Animals (Basel)* (2019)



HSP family genes are induced by IER5.(A) H1299 or 293T cells were transfected with control vector or an IER5 expression vector. Cells were harvested 21 hrs or 27 hrs post-transfection and microarray expression analysis was performed. The table shows the HSP family genes, among the genes induced by IER5. (B) H1299 cells were transfected with control, IER5-Flag or mutant IER5-Flag expression vectors (representative image of mut 1 is shown in Fig. S1). Cells were harvested 27 hrs post-transfection, and mRNA expressions of the HSP family genes were analyzed by Northern blotting. (C) H1299 and 293T cells were transfected with control vector or IER5-Flag expression vector, and cells were harvested 24 hrs post-transfection. Expressions of the HSP family proteins were analyzed by Western blotting. (D–F) Control or IER5-targeting siRNAs were introduced into OE33 cells. Cells were harvested 52 hrs post-transfection. Expression of IER5 (D,F) and HSPA1A (E,F) were analyzed by quantitative RT-PCR (D,E) and Western blotting (F). (**$p < 0.01$). (G) The promoter regions of HSPA1A, HSPA1B and HSPA6 were inserted into the luciferase reporter plasmid containing a minimal promoter, and assayed 24 hrs post-transfection. Experiments were run in triplicate, and data are represented as the mean-fold activation ±SD. (H) Serially deleted regions of the HSPA1A promoter were analyzed as in (G). Numbers indicate the position of the 5′ most nucleotide relative to the transcription initiation site. A heat shock element (HSE), to which HSF1 binds, was found between positions −132 and −109.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: IER5 generates a novel hypo-phosphorylated active form of HSF1 and contributes to tumorigenesis. *Sci Rep* (2016)



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Handling & Storage

Handling	Avoid freeze/thaw cycles.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Heat shock protein 40
Application	ICC, IF, IHC (PS), IP, WB
Application Notes	Detects a band of ~40kDa by Western blot.
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
GenBank ID	D49547
Host	Rabbit
Immunogen	Recombinant human Hsp40.
Purity Detail	Protein A affinity purified.
Recommendation Dilutions/Conditions	Western Blot (1:1,000, colorimetric)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from rabbit serum.
Species Reactivity	Beluga, Bovine, Chicken, Dog, Fish, Guinea pig, Hamster, Human, Monkey, Mouse, Mussel, Porcine, Rabbit, Rat, Scallop, Sheep, Xenopus
Technical Info / Product Notes	Recommended by the Human Protein Atlas Organization for IHC (Ensembl No. ENSG00000132002).
UniProt ID	P25685

Worry-free Guarantee

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