

HSC70/HSP70

polyclonal antibody

The Hsp70 family of heat shock proteins contains multiple homologs ranging in size from 66-78 kDa, and are the eukaryotic equivalents of the bacterial DnaK. The most studied Hsp70 members include the cytosolic stress-induced Hsp70 (Hsp72), the constitutive cytosolic Hsc70 (Hsp73), and the ER-localized BiP (Grp78). Hsp70 family members contain highly conserved N-terminal ATPase and C-terminal protein binding domains. Binding of peptide to Hsp70 is assisted by Hsp40, and stimulates the inherent ATPase activity of Hsp70, facilitating ATP hydrolysis and enhanced peptide binding. Hsp70 nucleotide exchange and substrate binding coordinates the folding of newly synthesized proteins, the re-folding of misfolded or denatured proteins, coordinates trafficking of proteins across cellular membranes, inhibits protein aggregation, and targets the degradation of proteins via the proteasomal pathway.

This antibody is covered by our [Worry-Free Guarantee](#).

Citations: 11

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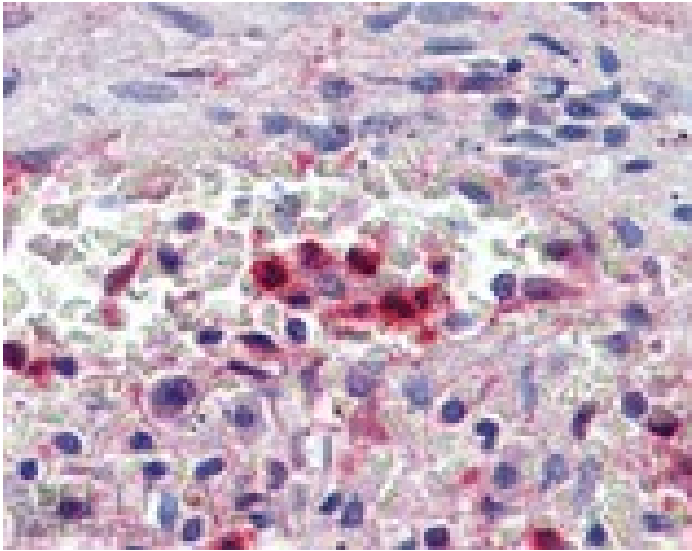
Ordering Information

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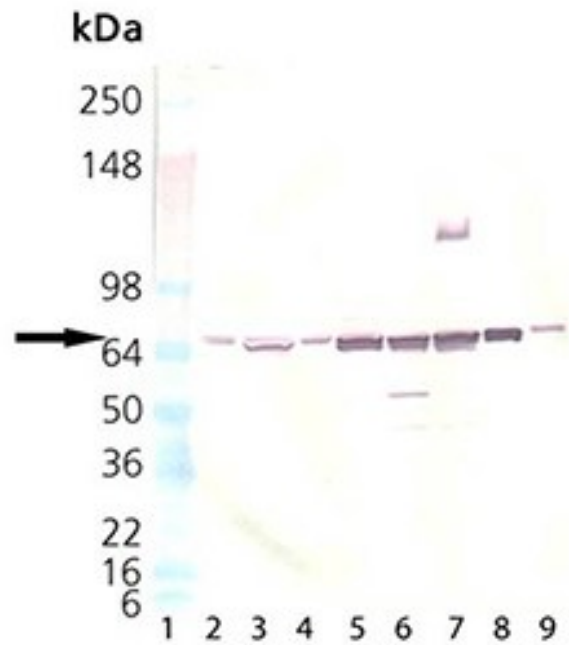
ADI-SPA-757-D	50µg
ADI-SPA-757-F	200µg

Manuals, SDS & CofA

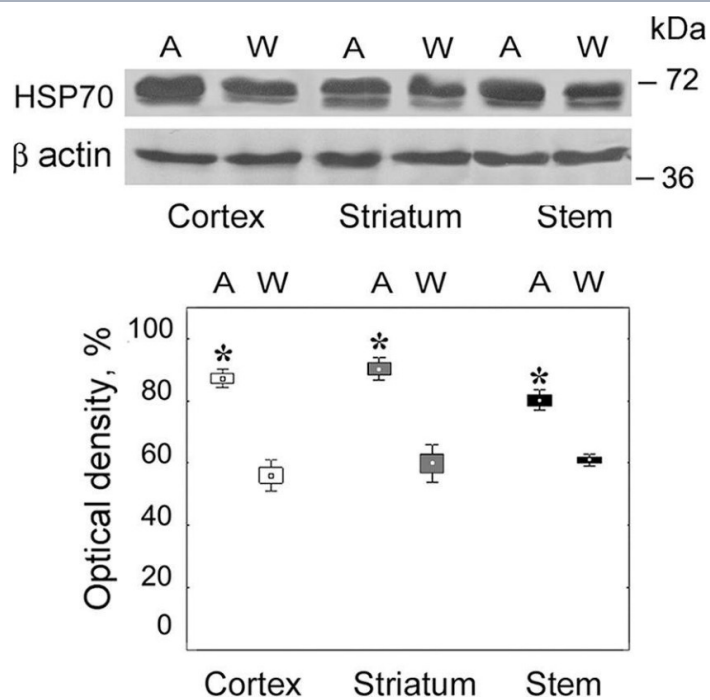
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Immunohistochemistry analysis of human spleen, neutrophils tissue stained with HSC70/HSP70, pAb at 10µg/ml.



Western blot analysis of HSC70/HSP70, pAb (Product No. ADI-SPA-757): Lane 1: MW Marker , Lane 2: 3T3 Cell Lysate (Product No. ADI-LYC-3T100), Lane 3: 3T3 Cell Lysate (heat shocked) (Product No. ADI-LYC-3T101), Lane 4: PC-12 Cell Lysate (Product No. ADI-LYC-PC100), Lane 5: PC-12 Cell Lysate (heat shocked) (Product No. ADI-LYC-PC101), Lane 6: HeLa Cell Lysate (Product No. ADI-LYC-HL100), Lane 7: HeLa Cell Lysate (heat shocked) (Product No. ADI-LYC-HL101), Lane 8: HSP70/HSP72 (human), (recombinant) (Product No. ADI-NSP-555), Lane 9: HSC70/HSP73 (bovine), (recombinant) (Product No. ADI-SPP-751)



Content of HSP70 in brain parts of August and Wistar rats. On the top, Western blots of HSP70 with the use of corresponding antibodies. Molecular mass of standard protein markers is shown. On the bottom, relative subunit quantities as percentage from the maximum magnitude normalized to β actin level and presented as means and SEM. *Reliable difference from control magnitude ($p = 0.02$, $n = 8$). A, August rats; W, Wistar rats.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Detection of active proteasome structures in brain extracts: proteasome features of August rat brain with violations in monoamine metabolism. *Oncotarget* (2017)

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 70, Hsc70, Hsp73
Application	IHC (PS), WB
Application Notes	Detects a band of ~70kDa by Western blot.
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
Host	Rabbit
Immunogen	Synthetic peptide corresponding to a portion of rat Hsp70.
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	Bovine, Chicken, Dog, Drosophila, Fish, Guinea pig, Hamster, Human, Monkey, Mouse, Plant, Porcine, Rabbit, Rat, Sheep, Yeast
UniProt ID	P63018
Worry-free Guarantee	This antibody is covered by our Worry-Free Guarantee .



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