HSP60 monoclonal antibody (LK-1)

Hsp60 is a member of the chaperonin family of heat shock proteins, with homologs functioning in the cytosol and mitochondria to fold nascent and aggregated proteins. Hsp60 is the eukaryotic homolog of the *E. coli* GroEL protein, and forms a multimeric complex in the mitochondria with Hsp10 (Cpn10) to form a large central cavity in which ATP-dependent protein folding takes place. TRiC/CCT, a eukaryotic relative of Hsp60, is expressed in the cytosol and participates in the folding of actin and tubulin substrates, but lacks any association with an Hsp10-like co-factor.

This antibody is covered by our Worry-Free Guarantee.

Citations: 56 View Online »

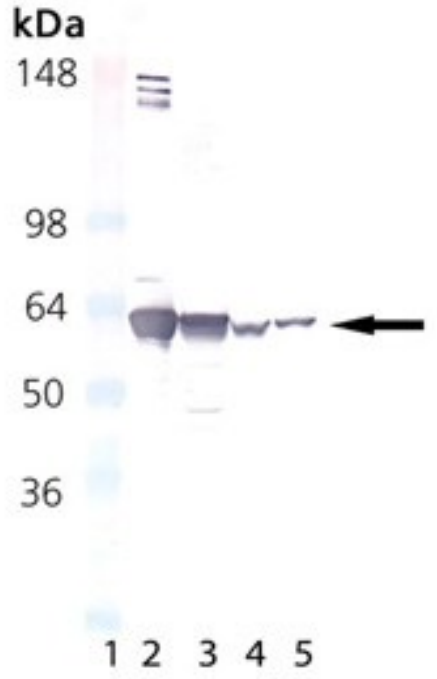
Ordering Information

Order Online »

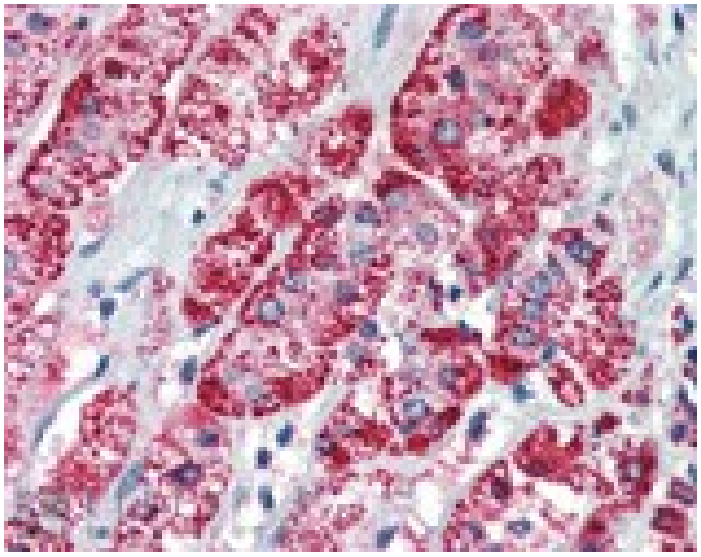
ADI-SPA-806-D	50µg
ADI-SPA-806-F	200µg

Manuals, SDS & CofA

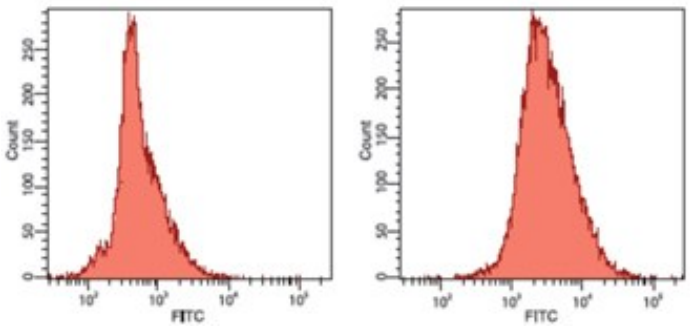
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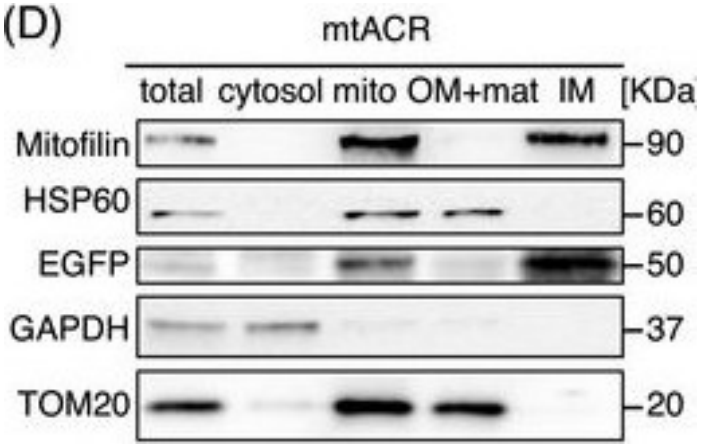
Western Blot Analysis of Hsp60 mAb (LK-1) (Prod. No. ADI-SPA-806): Lane 1: MW Marker, Lane 2: Hsp60 (human) (recombinant) Protein (Prod. No. ADI-NSP-540), Lane 3: HeLa Cell Lysate Heat Shocked (Prod. No. ADI-LYC-HL101), Lane 4: PC-12 Cell Lysate Heat Shocked (Prod. No. ADI-LYC-PC101), Lane 5: 3T3 Cell Lysate Heat Shocked (Prod. No. ADI-LYC-3T101)



Immunohistochemistry analysis of human adrenal tissue stained with HSP60, mAb (LK-1) at 10µg/ml.

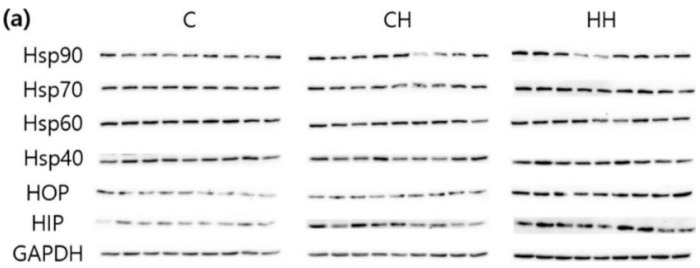


Flow cytometry analysis of human hepatoma QGY cells analyzed by flow cytometry using isotype control antibody (left) or HSP60 antibody (LK-1) (right).



Screening and targeting an anion channelrhodopsin GtACR1 to mitochondria. (A) Representative images of HeLa cells expressing fused channelrhodopsins, which were N□terminal fused with 4cox8 and C□terminal fused with EGFP. Scale bars, 10 μm. (B) Quantitative analysis of the colocalization between fused channelrhodopsins and mitochondria indicated by the Pearson Correlation Coefficient (4cox8□GtCCR4, n = 12; 4cox8□PoXeR, n = 27; 4cox8□VchR1, n = 18; 4cox8□NsXeR, n = 32; 4cox8□GtACR1, n = 50; ****p < 0.0001). (C) Mitochondrial location and the capability of fused channelrhodopsins maintaining MMP without photo□stimulation. (D) The submitochondrial fraction location of mtACR. Mitofilin was used as a marker of mitochondrial inner membrane; EGFP as a marker of fused channelrhodopsin mtACR; HSP60 as the marker of mitochondrial matrix; TOM20 as a marker of mitochondrial outer membrane; GAPDH as the marker of cytosol. (E and F) Representative images of astrocyte and neuron expressing EGFP□fused mtACR. TMRM was used as the marker of mitochondria. Scale bars, 10 μm.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Neurotransmitter accumulation and Parkinson’s disease-like phenotype caused by anion channelrhodopsin opto-controlled astrocytic mitochondrial depolarization in substantia nigra pars compacta. *MedComm (2020)* (2024)



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)

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	Chaperonin 60, CPN60, HspD1, heat shock protein 60
Application	ELISA, Flow Cytometry, IF, IHC (PS), IP, WB
Application Notes	Detects a band of ~60kDa by Western blot.
Clone	LK-1
Formulation	Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.
GenBank ID	M34664
Host	Mouse
Immunogen	Recombinant human Hsp60.
Isotype	IgG1
Purity Detail	Protein G affinity purified.
Recommendation Dilutions/Conditions	Flow Cytometry (1:100)Immunoprecipitation (1:80)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 ascites.
Species Reactivity	Bovine, Chicken, Dog, Drosophila, Guinea pig, Hamster, Human, Monkey, Mouse, Porcine, Rabbit, Rat, Sheep, Xenopus

UniProt ID P10809

Worry-free Guarantee **This antibody is covered by our Worry-Free Guarantee .**

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