

# HSP90 $\alpha$ polyclonal antibody

The Hsp90 family of heat shock proteins represents one of the most abundantly expressed and highly conserved families of cellular chaperones whose expression can be upregulated under conditions of cellular stress, and includes cytoplasmic (Hsp90-alpha/beta), ER (grp94), and mitochondrial (TRAP1) localized members. Structurally, Hsp90 is characterized by an N-terminal ATP-binding domain, a medial substrate-binding domain, and a C-terminal dimerization motif. Hsp90 dimers function in cooperation with cochaperones (e.g. Hsp40, Hsp70, Hop, p23) to stabilize a multitude of client protein substrates, including steroid hormone receptors, protein kinases, and transcription factors. The essential binding and hydrolysis of ATP by Hsp90 is inhibited by ansamycin drugs (e.g. geldanamycin, 17-AAG) which occupy the N-terminal Hsp90 nucleotide-binding pocket. Many Hsp90 client proteins such as erbB2/Her-2, c-raf, bcr-abl, p53, and hTERT, are members of well characterized oncogenic pathways, making Hsp90 inhibitors useful anticancer agents.

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

Citations: 29

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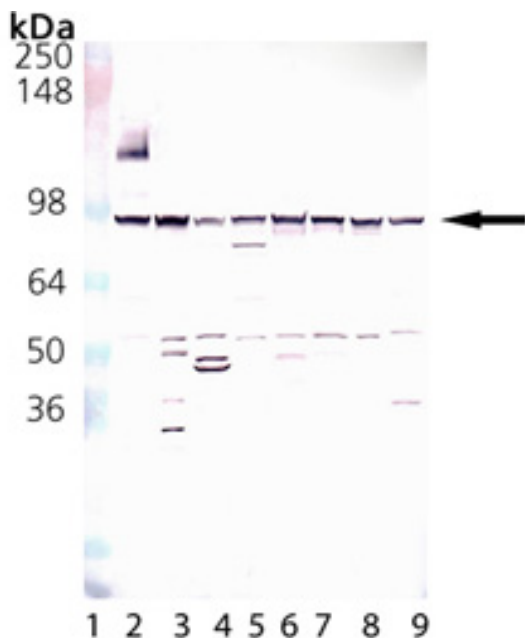
## Ordering Information

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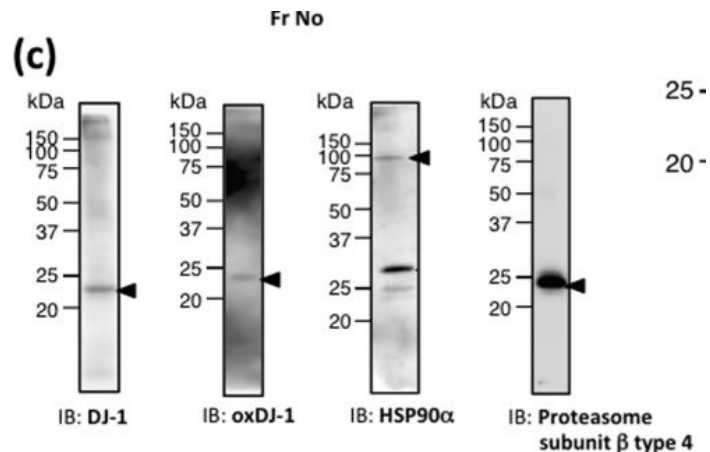
ADI-SPS-771-D	50 $\mu$ g
ADI-SPS-771-F	200 $\mu$ g

## Manuals, SDS & CofA

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Western blot analysis of HSP90 $\alpha$ , pAb (Prod. No. ADI-SPS-771): Lane 1: MW Marker, Lane 2: HeLa Cell Lysate (heat shocked) (Prod. No. ADI-LYC-HL101), Lane 3: PC-12 Cell Lysate (heat shocked) (Prod. No. ADI-LYC-PC101), Lane 4: 3T3 Cell Lysate (heat shocked) (Prod. No. ADI-LYC-3T101), Lane 5: CHO-K1 Cell Lysate (heat shocked), Lane 6: MDBK Cell Lysate (heat shocked), Lane 7: MDCK Cell Lysate (heat shocked), Lane 8: Vero Cell Lysate (heat shocked), Lane 9: RK-13 Cell Lysate (heat shocked)



Biochemical properties of the polymer form of oxidized DJ-1 detected in the erythrocytes of unmedicated PD patients. (a) Proteins containing the polymer form of oxDJ-1 were separated by DEAE column chromatography, and the oxDJ-1 content of each fraction was determined by using competitive ELISA. The mean  $\pm$  SD ( $n = 3$ ) was shown.  $**P < 0.01$ , Tukey-Kramer test, ANOVA, when compared with buffer control. A major oxDJ-1 peak (Fr. 10) is indicated by the black arrow. (b) Proteins eluted in Fr. 10 by DEAE column chromatography were visualized by silver staining, and each band was subjected to in-gel digestion and MALDI-TOF MS analysis. Identified proteins are indicated. (c) Proteins eluted in Fr. 10 by DEAE column chromatography were subjected to western blot analysis for DJ-1, oxDJ-1, HSP90 $\alpha$ , and proteasome subunit  $\beta$  type 4. (d) 20 S proteasome purified from human erythrocytes was incubated for 18 h at 4  $^{\circ}$ C in either the presence or absence of purified recombinant human oxDJ-1 in 50 mM HEPES buffer (pH 7.4) supplemented with 10% glycerol, 2 mM ATP and 2 mM DTT. Samples were then separated by gel chromatography, and each fraction was subjected to western blot analysis.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Oxidation and interaction of DJ-1 with 20S proteasome in the erythrocytes of early stage Parkinson's disease patients. *Sci Rep* (2016)

## 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** HSP86, Heat shock protein 90α

**Application** Cell migration, IHC, Inhibition assay, WB

**Application Notes** Detects a band of ~90kDa by Western blot.

**Formulation** Liquid. In PBS containing 0.09% sodium azide and 50% glycerol.

**GenBank ID** X16857

**Host** Rabbit

**Immunogen** Synthetic peptide corresponding to a portion of mouse Hsp86.

**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, Dog, Fish, Guinea pig, Hamster, Human, Monkey, Mouse, Porcine, Rabbit, Rat, Sheep, Xenopus

**UniProt ID** P07901

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



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