HSP27 polyclonal antibody

Hsp27 is one of the most common members of the highly conserved and ubiquitously expressed family of small heat shock proteins (sHsp), which also includes alphaB-crystallin. It is characterized by a conserved C-terminal alpha-crystallin domain consisting of two anti-parallel beta-sheets that promote oligomer formation required for its primary chaperone function as inhibitor of irreversible protein aggregation. Hsp27 oligomerization is modulated by post-translational phosphorylation of Hsp27 at three serine residues, Ser15, Ser78, and Ser82, by a variety of protein kinases including MAPKAPK-3, PKAc-alpha, p70 S6K, PKD I, and PKC-delta. Hsp27 has been shown to inhibit actin polymerization by binding of unphosphorylated Hsp27 monomers to actin intermediate filaments. Anti-apoptotic functions of Hsp27 have also been identified through interactions with DAXX7, activation of Akt, and inhibition of apoptosome formation. Evidence suggests altered expression of Hsp27 is implicated in the pathogenesis of breast, ovarian, and prostate cancer.

This antibody is covered by our Worry-Free Guarantee.

Citations: 41 View Online »

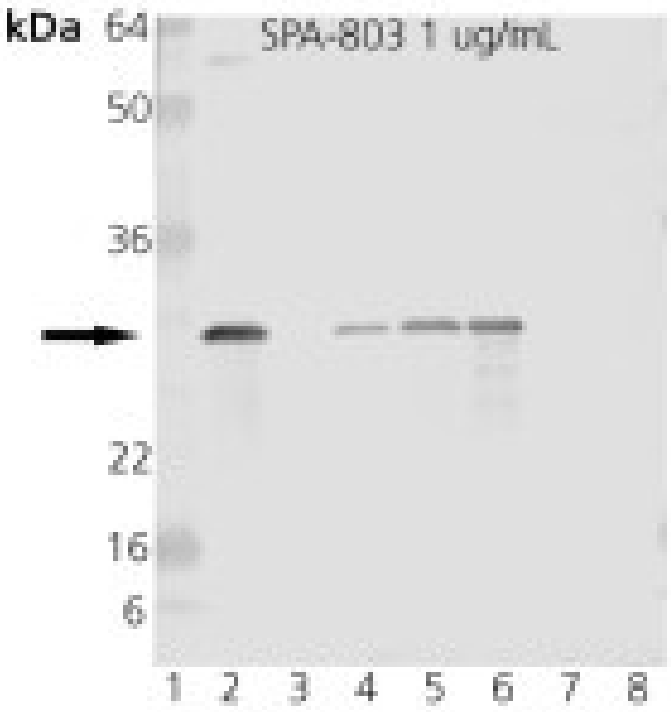
Ordering Information

Order Online »

ADI-SPA-803-D	50µg
ADI-SPA-803-F	200µg

Manuals, SDS & CofA

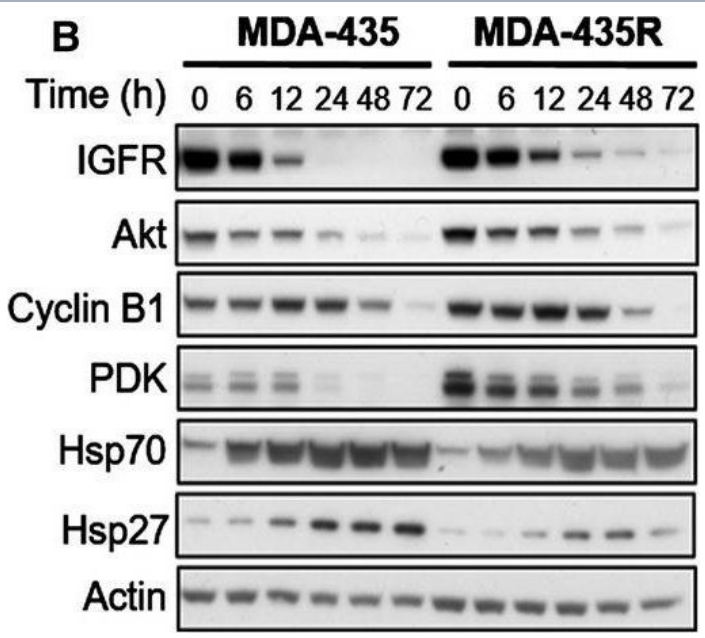
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Western blot analysis of HSP27 pAb: Lane 1: MW marker, Lane 2: HSP27 Recombinant Human Protein, Lane 3: HSP25 Recombinant Murine Protein (Negative Control), Lane 4: HeLa, Lane 5: HeLa, Heat Shocked, Lane 6: Vero, Heat Shocked, Lane 7: 3T3, Heat Shocked, Lane 8: PC-12, Heat Shocked.

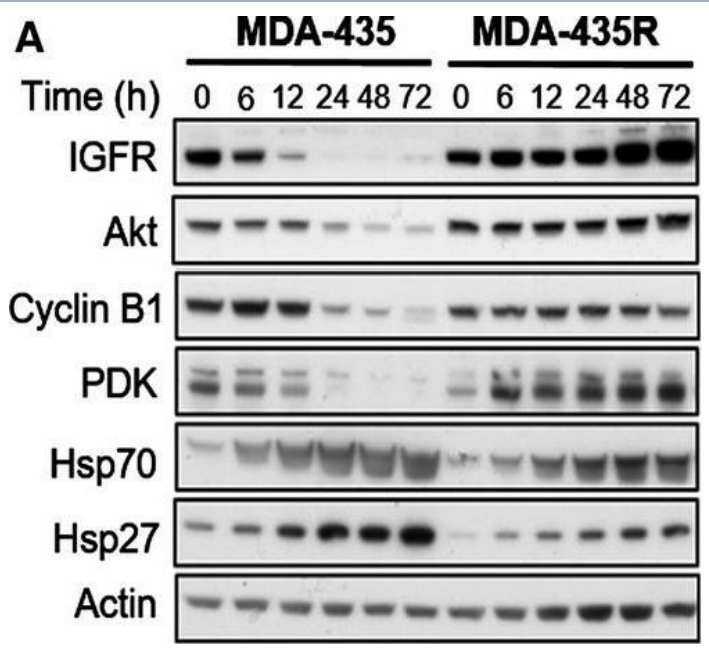


Immunohistochemistry analysis of human heart tissue stained with HSP27, pAb at 10µg/ml.



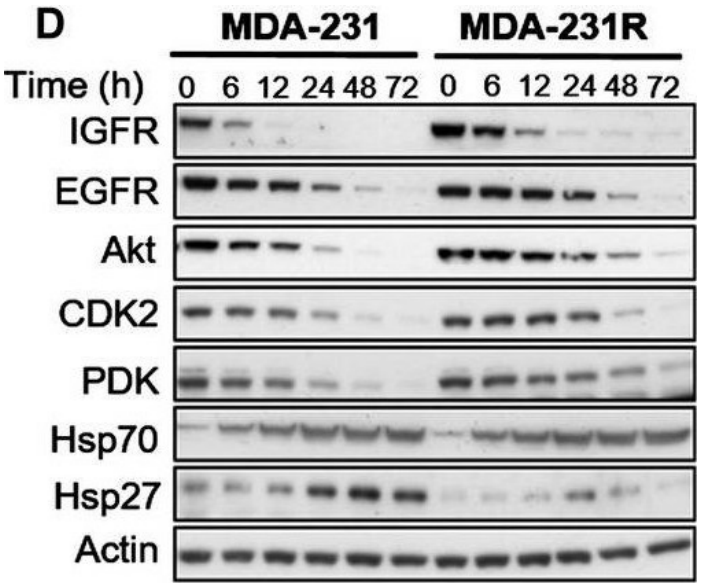
Molecular effects of HSP90 inhibition by 17-AAG on HSP90 client proteins in parental and resistant cell lines. MDA-435 parental and resistant MDA-435R cells treated with 0.1 μm of 17-AAG (~ 5 × 17-AAG IC50 concentrations of the parental cell line) (A) and with 30 μm of 17-AAG (~ 5 × 17-AAG IC50 concentrations of the resistant cell line) (B). MDA-231 parental and resistant MDA-231R cells treated with 5.0 μm of 17-AAG (~ 5 × 17-AAG IC50 concentrations of the parental cell line) (C) and with 50 μm of 17-AAG (~ 5 × 17-AAG IC50 concentrations of the resistant cell line) (D). Total cell lysates were collected at the indicated time-points and analysed by western blotting.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Histone deacetylase activity mediates acquired resistance towards structurally diverse HSP90 inhibitors. *Mol Oncol* (2017)



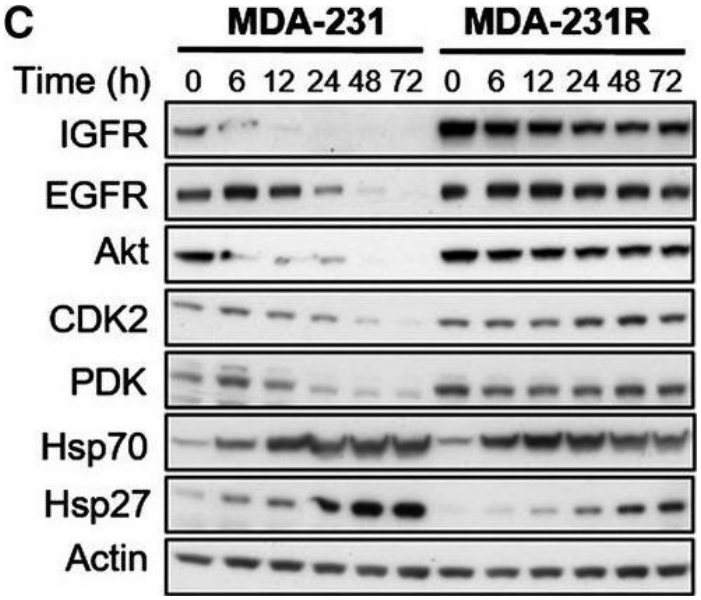
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Handling & Storage

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

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	HspB1, Heat shock protein 27
Application	ELISA, IHC, IP, WB
Application Notes	Detects a band of ~27kDa by Western blot.
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
GenBank ID	L39370
Host	Rabbit
Immunogen	Recombinant human Hsp27.
Purity Detail	Protein A affinity purified.
Recommendation Dilutions/Conditions	ELISA (1:1,000)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	Human, Monkey, Porcine
UniProt ID	P04792
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

Last modified: May 29, 2024

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