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 »

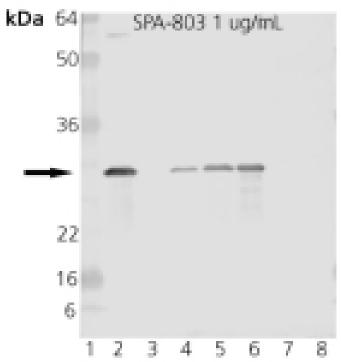
Ordering Information

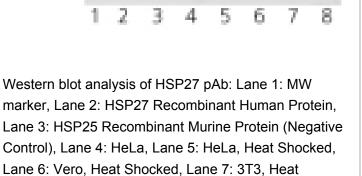
Order Online »

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

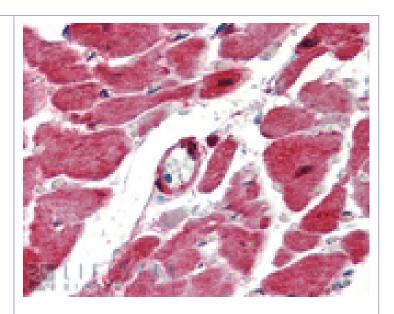
Manuals, SDS & CofA

View Online »

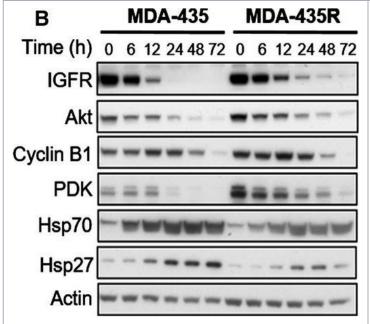




Shocked, Lane 8: PC-12, Heat Shocked.

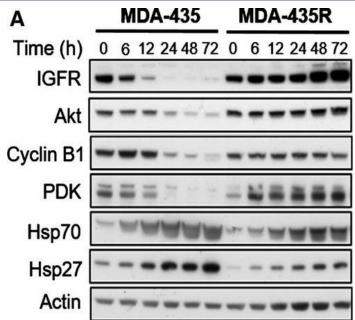


Immunohistochemistry analysis of human heart tissue stained with HSP27, pAb at $10\mu g/ml$.



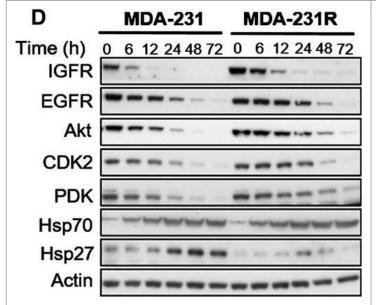
Molecular effects of HSP90 inhibition by 17 AAG on HSP90 client proteins in parental and resistant cell lines. MDA 435 parental and resistant MDA 435R cells treated with 0.1 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (A) and with 30 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the resistant cell line) (B). MDA 231 parental and resistant MDA 231R cells treated with 5.0 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (C) and with 50 μ m 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)



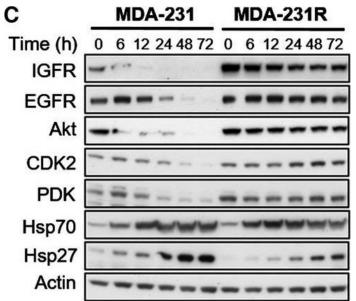
Molecular effects of HSP90 inhibition by 17 AAG on HSP90 client proteins in parental and resistant cell lines. MDA 435 parental and resistant MDA 435R cells treated with 0.1 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (A) and with 30 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the resistant cell line) (B). MDA 231 parental and resistant MDA 231R cells treated with 5.0 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (C) and with 50 μ m 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)



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 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (A) and with 30 μ m 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 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (C) and with 50 μ m 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)



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 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (A) and with 30 μ m 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 μ m of 17 AAG (~ 5 × 17 AAG IC50 concentrations of the parental cell line) (C) and with 50 μ m 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)

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 NotesDetects 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



info-

eu@enzolifesciences.com