HSP90 monoclonal antibody (2D12)

The 90kDa molecular chaperone family includes 90 kDa heat shock protein Hsp90 and 94 kDa glucose-regulated protein grp94, both major molecular chaperones of the cytosol and the endoplasmic reticulum. Mammalian cells contain isoforms Hsp90α and Hsp90β, encoded by separate genes. The amino acid sequences of human and yeast Hsp90-alpha are 85% and 90% homologous to those of Hsp90β , respectively. All known members of the Hsp90 protein family are highly conserved, especially in the N-terminal and C-terminal regions containing independent chaperone sites with different substrate specificity. These ubiquitous and highly conserved proteins account for 1-2% of all cellular proteins in most cells. Hsp90 functions as part of the cell's powerful network of chaperones to fight the deleterious consequences of protein unfolding caused by non-physiological conditions. In the absence of stress, however, Hsp90 provides a necessary component of such fundamental cellular processes as hormone signaling and cell cycle control. In this context, researchers identified key regulatory proteins as substrates of Hsp90, including steroid receptors, cell cycle kinases involved in signal transduction, and p53. Hsp90 may act as a capacitor for morphological evolution by buffering widespread variation, potentially affecting morphogenic pathways. When temperature and other stress factors compromise Drosophila Hsp90 buffering, cryptic variant expression occurs, and selection can lead to the continued expression of these traits even after Hsp90 function is restored.

This antibody is covered by our Worry-Free Guarantee.

Citations: 10 View Online »

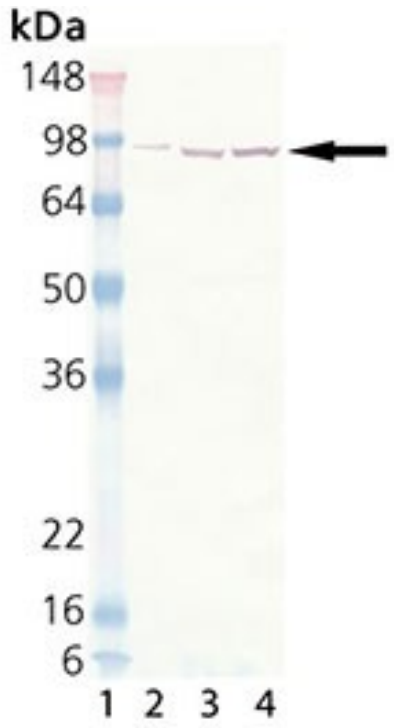
Ordering Information

Order Online »

ADI-SPA-845-D	50µl
ADI-SPA-845-F	200µl

Manuals, SDS & CofA

View Online »



Western Blot analysis of HSP90 mAb (2D12). Lane 1: MW marker, Lane 2: HSP90 (human) (native), (ADI-SPP-770), Lane 3: HeLa HS, (cell lysate) (Prod No. ADI-LYC-HL101), Lane4: Vero Heat Shock Cell Lysate.

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 90β
Application	IP, WB
Application Notes	Detects a band of ~90kDa by Western blot.
Clone	2D12
Formulation	Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.
GenBank ID	M57673 (HSP90alpha), M36829 (HSP90beta)
Host	Rat
Immunogen	Native mouse Hsp90.
Isotype	IgM
Purity Detail	Ammonium sulfate precipitation purified.
Recommendation Dilutions/Conditions	Western Blot (1:500, colorimetric)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from mouse ascites.
Species Reactivity	Beluga, Bovine, Chicken, Dog, Fish, Guinea pig, Hamster, Human, Monkey, Mouse, Rabbit, Rat, Sheep, Water mold

UniProt ID	P07901 (HSP90alpha), P11499 (HSP90beta)
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

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