HSP90 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: 22 View Online »

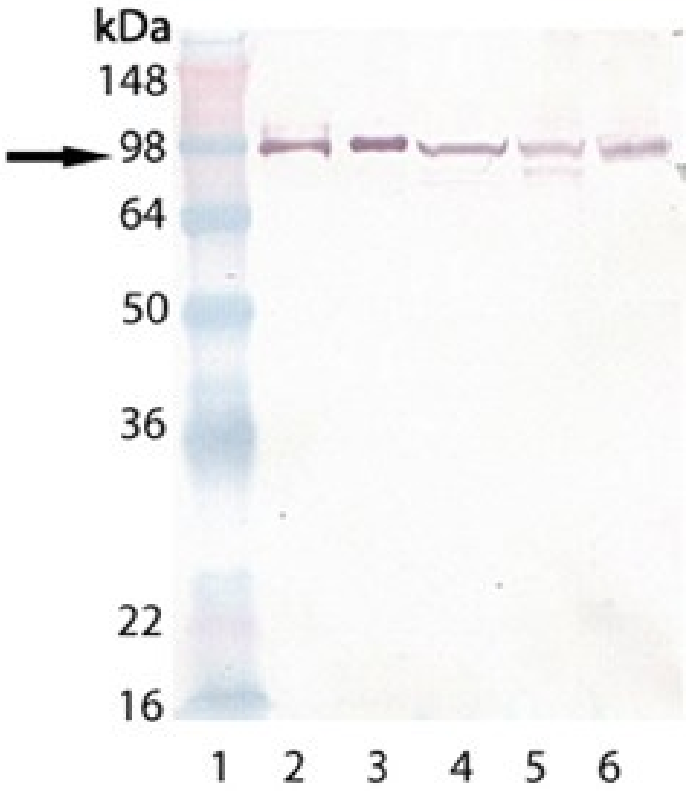
Ordering Information

Order Online »

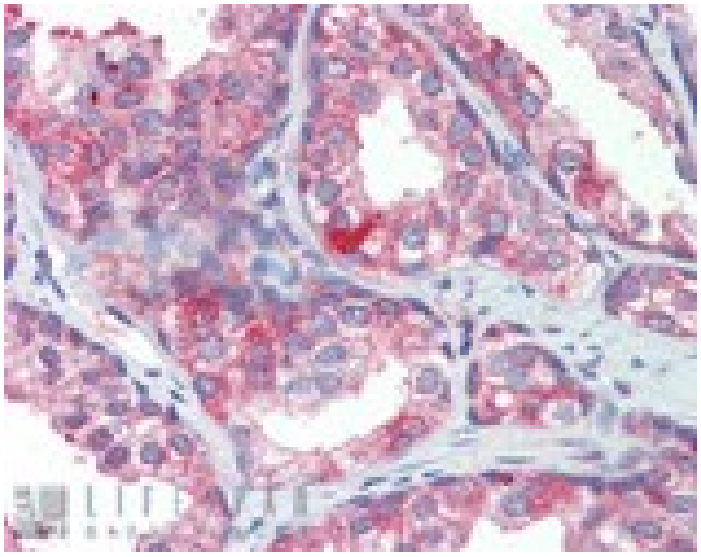
ADI-SPA-836-F	200µg

Manuals, SDS & CofA

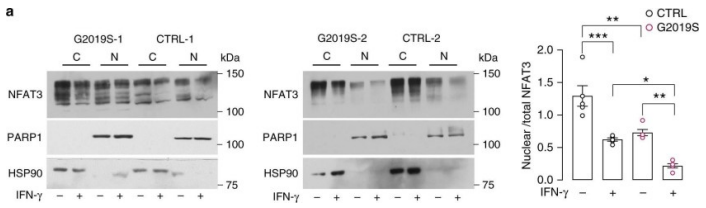
View Online »



Western blot analysis of HSP90, pAb (Prod. No. ADI-SPA-836): Lane 1: MW marker, Lane 2:HSP90α (human), (rec) (Prod. No. ADI-SPP-776), Lane 3: HSP90β (human), (rec) (Prod. No. ADI-SPP-777), Lane 4: HeLa (heat shocked) (Prod. No. ADI-LYC-HL101), Lane 5: 3T3 (heat shocked) (Prod. No. ADI-LYC-3T101),Lane 6: PC-12 (heat shocked) (Prod. No. ADI-LYC-PC101).

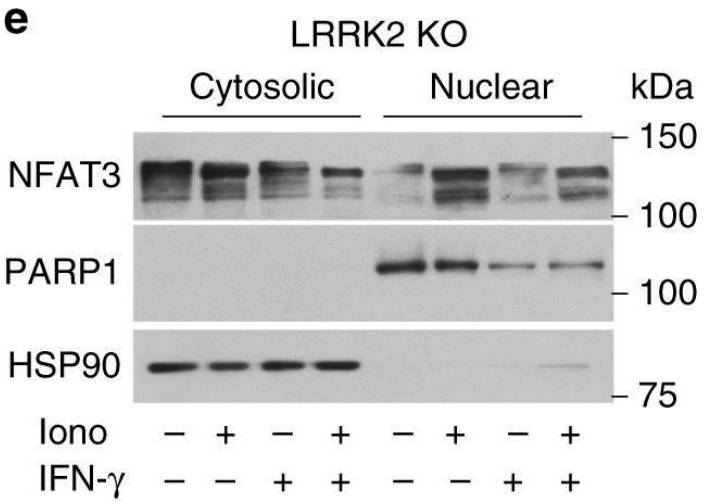


Immunohistochemistry analysis of human prostate tissue stained with HSP90, pAb at 10µg/ml.

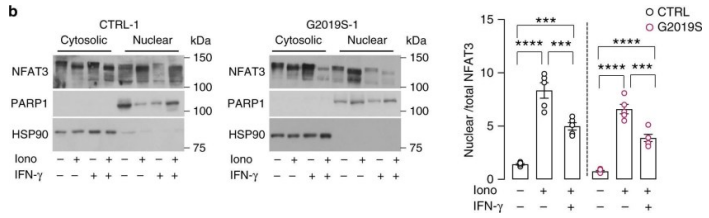


LRRK2 inhibits nuclear NFAT3 shuttling in human neurons.a Representative Western blots of NFAT3 in nuclear (N) and cytosolic (C) fractions of LRRK2 G2019S neurons and isogenic controls (left and middle panel). Treatment with 200 IU/mL IFN-γ is indicated. On the right, quantification of nuclear to total (N and C fraction) NFAT3 in LRRK2 G2019S iPSC-derived neurons and isogenic controls (mean ± SEM, two-way ANOVA, Bonferroni post hoc, ***P = 0.0003, **P = 0.0015, 0.0035 in sequence, *P = 0.0226; n = 5 independent experiments). b Representative Western blots of NFAT3 in N and C fractions of control (left panel) and isogenic LRRK2 G2019S neurons (middle panel). Treatments with 1 μM ionomycin for 30 min and 200 IU/mL IFN-γ for 24 h are indicated. On the right, quantification of nuclear to total (N and C fraction) NFAT3 in LRRK2 G2019S iPSC-derived neurons and isogenic controls (mean ± SEM, one-way ANOVA, Bonferroni post hoc, ****P < 0.0001, ***P = 0.0005, 0.0008, 0.0002 in sequence; n = 5 independent experiments). c Representative Western blot (left) and quantification (right) of NFAT3 from whole-cell extracts in LRRK2 G2019S neurons and isogenic controls. Treatments with 200 IU/mL IFN-γ are indicated (mean ± SEM, two-way ANOVA, Bonferroni post hoc, ***P = 0.0009, *P = 0.0421; n = 5 independent experiments). d Representative Western blot (left) and quantification (right) of NFAT3 from whole-cell extracts in control iPSC-derived neurons upon treatment with 200 IU/mL IFN-γ for 24 h, with and without treatment with a proteasome inhibitor (MG132, 20 nM for 24 h) (mean ± SEM, one-way ANOVA, Bonferroni post hoc, *P = 0.0399, 0.0437 in sequence; n = 3 independent experiments). e Representative Western blots of NFAT3 in nuclear and cytosolic fractions of LRRK2 KO neurons. Treatments with 1 μM ionomycin for 30 min and 200 IU/mL IFN-γ for 24 h are indicated. On the right, quantification of nuclear to total (N and C fraction) NFAT3 (mean ± SEM, one-way ANOVA, Bonferroni post hoc, ****P < 0.0001; n = 5 independent experiments).

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Interferon-γ signaling synergizes with LRRK2 in neurons and microglia derived from human induced pluripotent stem cells. *Nat Commun* (2020)



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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	Heat shock protein 90
Application	IHC (PS), WB
Application Notes	Detects a band of ~90kDa by Western blot.
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
Host	Rabbit
Immunogen	Synthetic peptide corresponding to aa 250-325 of human Hsp90.
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	Human, Mouse, Rabbit, Rat
UniProt ID	P07900 (HSP90α), P08238 (HSP90β)
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

Last modified: May 29, 2024

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