HSF1 monoclonal antibody (10H8)

HSFs (Heat Shock family of transcription factors), which consists of HSF 1-4, bind to highly conserved Heat shock elements (HSEs) in the promoter regions of heat shock genes, ultimately regulating the expression of Heat shock proteins (Hsps). On exposure to heat shock and other stresses, HSF1 localizes within seconds to discrete nuclear granules and on recovery from stress, HSF1 rapidly dissipates from the stress granules to a diffuse nucleoplasmic distribution.

This antibody is covered by our Worry-Free Guarantee.

Citations: 13 View Online »

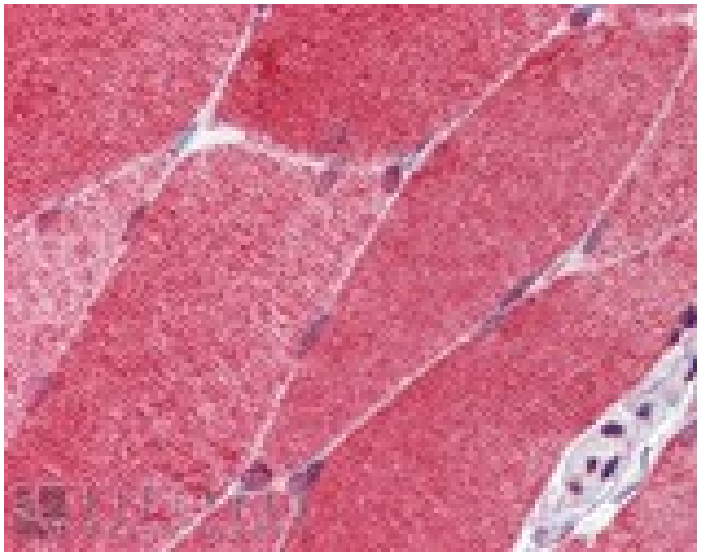
Ordering Information

Order Online »

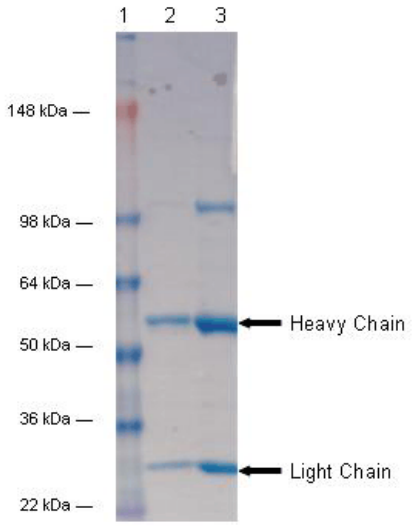
ADI-SPA-950-F	200µg

Manuals, SDS & CofA

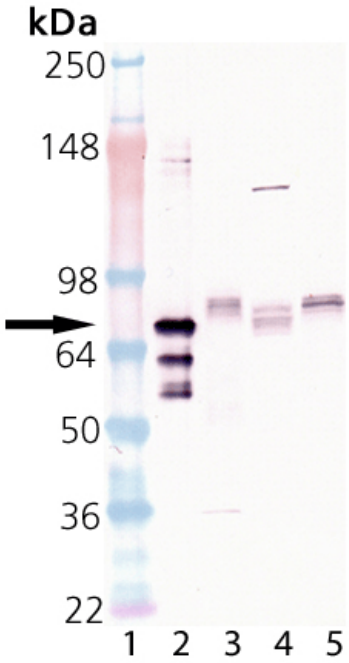
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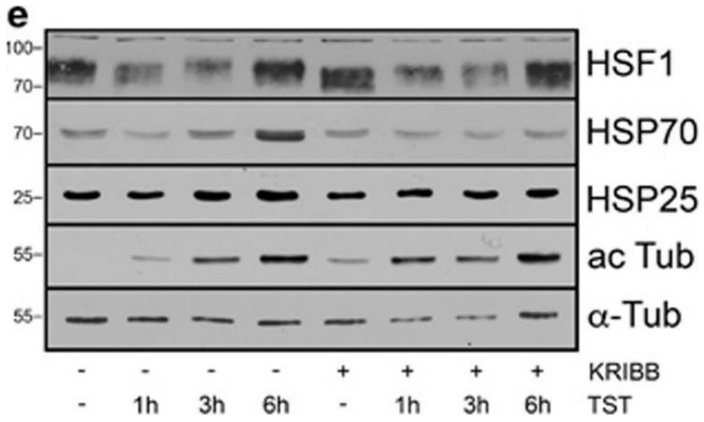
Immunohistochemistry analysis of human skeletal muscle tissue stained with HSF1, mAb (10H8) at 10µg/ml.



SDS-PAGE analysis of ADI-SPA-950: Lane 1: MW Marker, Lane 2: 1µg and Lane 3: 5µg of HSF1 monoclonal antibody (10H8), resolved under partially reduced condition.



Western Blot analysis of ADI-SPA-950: Lane 1: MW Marker, Lane 2: HSF1 (human), (recombinant) (His-tag), (Prod. No. ADI-SPP-900), Lane 3: HeLa lysate, (Prod. No. ADI-LYC-HL100), Lane 4: HeLa (heat shocked) lysate, (Prod. No. ADI-LYC-HL102), Lane 5: PC-12 lysate, (Prod. No. ADI-LYC-PC100).



Tubastatin A induces heat-shock protein expression by activating heat-shock factor 1. 661W cells were treated with 1, 5 and 10 μM of tubastatin A (TST) for 24 h (a), or in (b) with 10 μM TST for 8 h, or with 200 μM H_2O_2 for 6 h or were preincubated with 10 μM TST for 2 h followed by incubation with 200 μM H_2O_2 for 6 h. ac Tub, acetylated tubulin. α-Tub, α-tubulin. Co, untreated control. Quantitative evaluation of immunoblot analysis revealed a significant increase in heat-shock protein (HSP) 70 level after 8 h (c), while HSP25 was significantly enhanced after 24 h (d); n=4. (e) Heat-shock factor 1 (HSF1) activity was investigated using immunoblot analysis of 661W cell extracts that were treated 10 μM TST for 1, 3 and 6 h, or with 5 μM KRIBB11 (KR) for 6.5 h alone, or preincubated with 5 μM KR for 30 min, followed by incubation with 10 μM TST for 1–6 h. (f) Cell viability MTT assay. Cells were treated as indicated. TST (10 μM) for 8 h or KR (5 μM) for 8.5 h did not influence 661W cell number. H_2O_2 (200 μM) for 6 h led to a strong decrease in cell viability, which was enhanced by pre-incubation with TST for 2 h (TST+H_2O_2). Pre-incubation with KR for 30 min followed by incubation with TST for 2 h followed by treatment with H_2O_2 for 6 h (KR+TST+H_2O_2) did not diminish the protective effect of TST. Experiments were carried out three times with similar results. Data represent the mean±S.D. of one representative experiment with eight replicates and are expressed as the percent of the untreated control, which was set at 100%

Image collected and cropped by CiteAb under a CC-BY license from the following publication: HDAC6 inhibition by tubastatin A is protective against oxidative stress in a photoreceptor cell line and restores visual function in a zebrafish model of inherited blindness. *Cell Death Dis* (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	HSTF1, Heat shock factor protein 1
Application	IHC (PS), WB
Application Notes	Predicted MW of ~60kDa. Detects a band of ~85kDa by Western blot.
Clone	10H8
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
Gene/Protein Identifier	NM_008296 (RefSeq)
Host	Rat
Immunogen	Recombinant mouse HSF1.
Isotype	IgG1
Purity Detail	Protein G 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 ascites.
Species Reactivity	Human, Monkey, Mouse, Rabbit, Rat

UniProt ID P38532

Worry-free Guarantee **This antibody is covered by our Worry-Free Guarantee .**

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