TRAP1 monoclonal antibody (9B6)

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. It includes cytoplasmic (Hsp90-alpha/beta), ER (Grp94) and mitochondrial (TRAP1) localized members. Hsp90 is structurally composed of an N-terminal ATP binding domain, a medial substrate-binding region, and a C-terminal dimerization motif. Hsp90 dimers function in cooperation with cochaperones to stabilize a multitude of client protein substrates. TRAP1 (aka Hsp75) was originally identified as a chaperone binding partner for retinoblastoma protein. TRAP1 was later found by immunofluorescence to be localized to the mitochondria. TRAP1 is significantly more active as an ATPase due in part to the lack of regulatory elements in the C-terminus, but retains the ability to dimerize. However, it does not form stable complexes with typical cochaperones of Hsp90 like p23 and HOP4. Recently TRAP1 has been identified as a protective element for cell survival, and has been suggested as a novel target for anti-cancer therapeutics.

This antibody is covered by our Worry-Free Guarantee.

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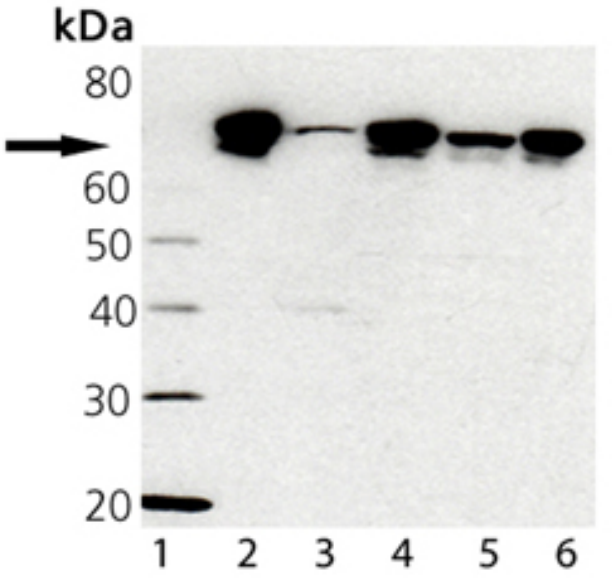
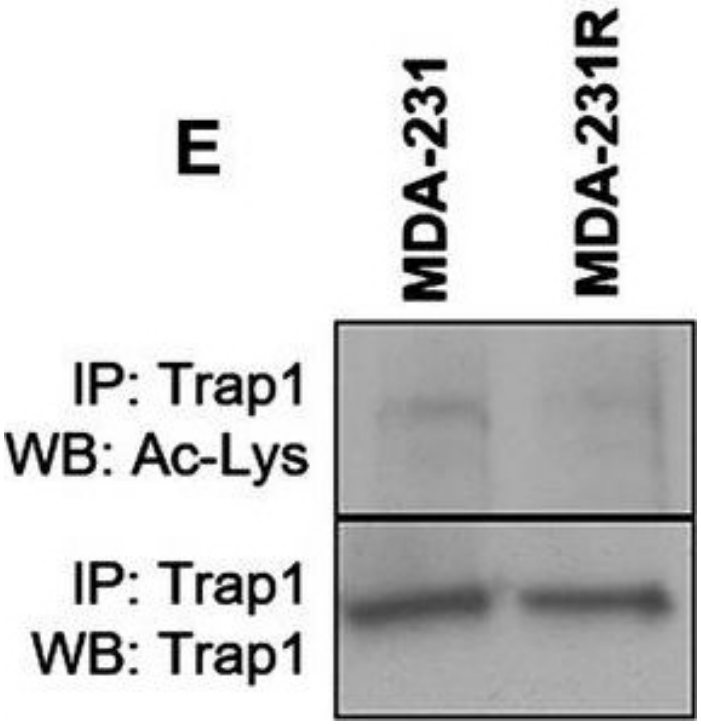


Western blot analysis of TRAP1 probed with TRAP1, mAb (9B6) (Prod. No. ADI-SPA-971): Lane 1: MWM, Lane 2: TRAP1 Recombinant Human Protein (Prod. No. ADI-SPP-848), Lane 3: HL-60 Cell Lysate, Lane 4: Hep G2 Cell Lysate, Lane 5: 3T3 Cell Lysate, Heat Shocked (Prod. No. ADI-LYC-3T101), Lane 6: HeLa Cell Lysate, Heat Shocked (Prod. No. ADI-LYC-HL101)



Altered NQO1 levels, HDAC family member expression and altered acetylation status in 17-AAG-resistant cell lines. Analysis of parental and resistant cell lines demonstrated altered expression levels of a number of molecules. Semiquantitative PCR demonstrated that the expression levels of NQO1 in resistant MDA-435 cells were decreased when compared with parental cells, while no alteration was noted between MDA-231 and MDA-231R cell lines (A). Western blot analysis of parental and resistant MDA-231 total cell lysates examining levels of HDAC family members in the presence and absence of 17-AAG for a period of 24 h (B). Analysis of acetylated HSP90 by immunoprecipitation of HSP90 and western blot analysis with antiacetylated lysine antibody of total cell lysates of parental and resistant MDA-231 cells treated with and without 17-AAG demonstrated increased acetylated HSP90 (C). Analysis of acetylation of Grp94 (D) and Trap1 (E) by immunoprecipitation and western blot analysis of MDA-231 and MDA-231R total cell lysates demonstrated no alteration in acetylation status. Acetylated lysine residue was detected by western blotting. Western blot analysis of acetylated histone 3 in parental and resistant MDA-231 cells treated with and without 17-AAG demonstrated decreased nuclear acetylation (F).

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	HSP75, Mitochondrial HSP90, TNF receptor-associated protein 1, MtHSP90
Application	WB
Application Notes	Detects a band of ~72kDa by Western blot.
Clone	9B6
Formulation	Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.
Host	Mouse
Immunogen	Recombinant human TRAP1.
Isotype	IgG2a
Purity Detail	Protein G affinity purified.
Recommendation Dilutions/Conditions	Western Blot (1:500, ECL)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from hybridoma tissue culture supernatant.
Species Reactivity	Human, Mouse
UniProt ID	Q12931

Worry-free Guarantee

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