

Basic Information

Product Name	Anti-Hsp90 alpha/HSP90AA1 Antibody	
Gene Name	HSP90AA1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, monkey, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Hsp90 alpha identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	85-100 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Heat shock protein HSP 90-alpha is a protein that in humans is encoded by the HSP90AA1 gene. The gene, HSP90AA1, encodes the human stress-inducible 90-kDa heat shock protein alpha (Hsp90A). Complemented by the constitutively expressed paralog Hsp90B which shares over 85% amino acid sequence identity, Hsp90A expression is initiated when a cell experiences proteotoxic stress. Once expressed Hsp90A dimers operate as molecular chaperones that bind and fold other proteins into their functional 3-dimensional structures. This molecular chaperoning ability of Hsp90A is driven by a cycle of structural rearrangements fueled by ATP hydrolysis. Current research on Hsp90A focuses in its role as a drug target due to its interaction with a large

number of tumor promoting proteins and its role in cellular stress adaptation.

Reference

Anti-Hsp90 alpha/HSP90AA1 Antibody被引用在4文献中。

Selected Validation Data

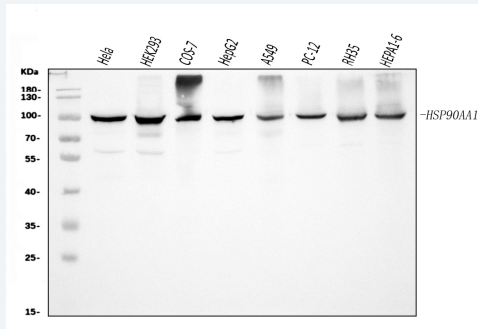


Figure 1. Western blot analysis of Hsp90 alpha/HSP90AA1 using anti-Hsp90 alpha/HSP90AA1 antibody (PB0681). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,

Lane 2: HEK293 whole cell lysates,

Lane 3: COS-7 whole cell lysates,

Lane 4: HepG2 whole cell lysates,

Lane 5: A549 whole cell lysates,

Lane 6: PC-12 whole cell lysates,

Lane 7: RH35 whole cell lysates,

Lane 8: HEPA1-6 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Hsp90 alpha/HSP90AA1 antigen affinity purified polyclonal antibody (PB0681) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Hsp90 alpha/HSP90AA1 at approximately 85-100 kDa. The expected band size for Hsp90 alpha/HSP90AA1 is at 85 kDa.

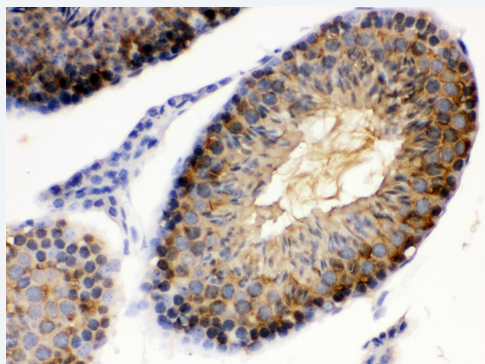


Figure 2. IHC analysis of Hsp90 alpha/HSP90AA1 using anti-Hsp90 alpha/HSP90AA1 antibody (PB0681). Hsp90 alpha/HSP90AA1 was detected in a paraffin-embedded section of mouse testis tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Hsp90 alpha/HSP90AA1 Antibody (PB0681) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.

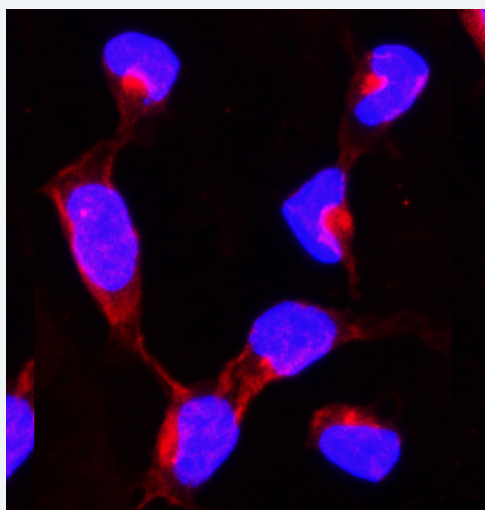


Figure 5. IF analysis of Hsp90 alpha using anti-Hsp90 alpha antibody (PB0681). Hsp90 alpha was detected in immunocytochemical section of U20S cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2µg/mL rabbit anti-Hsp90 alpha Antibody (PB0681) overnight at 4°C. DyLight 550 Conjugated Goat Anti-Rabbit IgG (BA1135) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

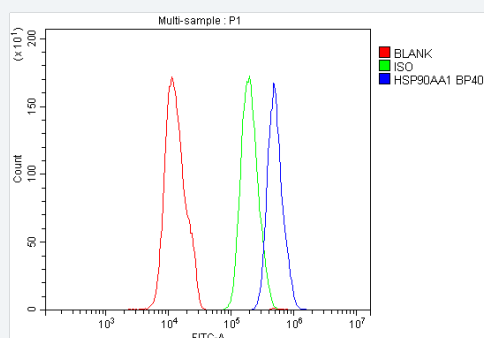


Figure 6. Flow Cytometry analysis of SiHa cells using anti-Hsp90 alpha/HSP90AA1 antibody (PB0681). Overlay histogram showing SiHa cells stained with PB0681 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Hsp90 alpha/HSP90AA1 Antibody (PB0681) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.