abcam

Product datasheet

Anti-Hsp90 antibody ab13495

14 Abreviews 28 References 6 Images

Overview

Product name	Anti-Hsp90 antibody
Description	Rabbit polyclonal to Hsp90
Host species	Rabbit
Specificity	Detects 90kD proteins corresponding to the molecular mass of hsp90aß.
Tested applications	**Suitable for:** ELISA, IP, IHC-P, IHC-Fr, ICC/IF, ICC, Flow Cyt, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human, Xenopus laevis
Immunogen	Human Hsp90.
Positive control	RAW 264.7 whole cell lysate (ab7187) can be used as a positive control in WB. HeLa Cell Lysate (Heat Shocked). Hsp90 Protein.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Constituent: Whole serum
Purity	Whole antiserum
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab13495** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

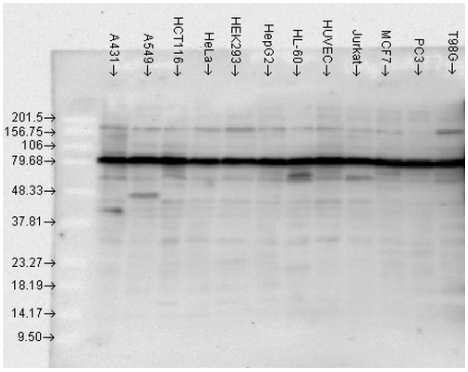
Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

Application	Abreviews	Notes
IHC-P	★★★★☆	Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
ICC/IF	★★★★☆	Use at an assay dependent concentration.
ICC	★★★★★	Use at an assay dependent concentration.
Flow Cyt	★★★★★	1/250. (see Abreview). ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★	1/20000 - 1/40000. Detects a band of approximately 90 kDa (predicted molecular weight: 83.2 (beta) , 84.5 (alpha) kDa).

Target

Function	Molecular chaperone that promotes the maturation, structural maintenance and proper regulation of specific target proteins involved for instance in cell cycle control and signal transduction. Undergoes a functional cycle that is linked to its ATPase activity. This cycle probably induces conformational changes in the client proteins, thereby causing their activation. Interacts dynamically with various co-chaperones that modulate its substrate recognition, ATPase cycle and chaperone function.
Sequence similarities	Belongs to the heat shock protein 90 family.
Domain	The TPR repeat-binding motif mediates interaction with TPR repeat-containing proteins like the co-chaperone STUB1.
Post-translational modifications	ISGylated. S-nitrosylated; negatively regulates the ATPase activity and the activation of eNOS by HSP90AA1.
Cellular localization	Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Western blot - Anti-Hsp90 antibody (ab13495)

All lanes : Anti-Hsp90 antibody (ab13495) at 1/10000 dilution (2 hours at room temperature)

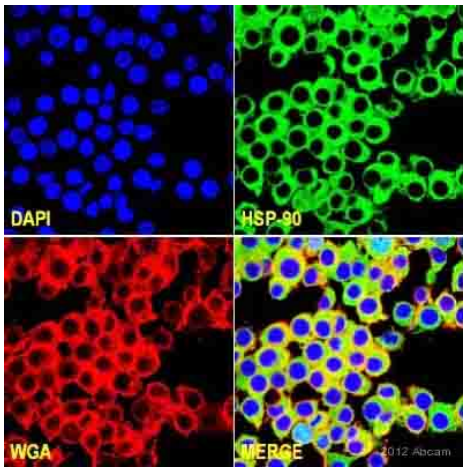
Lane 1 : A431 with BSA for 30 minutes at room temperature
Lane 2 : A549 with BSA for 30 minutes at room temperature
Lane 3 : HCT116 with BSA for 30 minutes at room temperature
Lane 4 : Hela with BSA for 30 minutes at room temperature
Lane 5 : HEK293 with BSA for 30 minutes at room temperature
Lane 6 : HepG2 with BSA for 30 minutes at room temperature
Lane 7 : HL-60 with BSA for 30 minutes at room temperature
Lane 8 : HUVEC with BSA for 30 minutes at room temperature
Lane 9 : Jurkat with BSA for 30 minutes at room temperature
Lane 10 : MCF7 with BSA for 30 minutes at room temperature
Lane 11 : PC3 with BSA for 30 minutes at room temperature
Lane 12 : T98G with BSA for 30 minutes at room temperature

Lysates/proteins at 2 µg per lane.

Blocking peptides at 1.5 % per lane.

Secondary
All lanes : HRP Donkey anti-rabbit IgG, 1 hour at room temperature

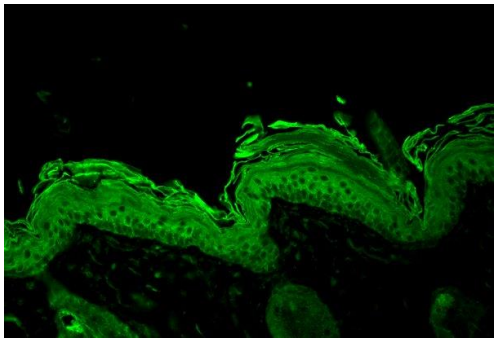
Predicted band size: 83.2 (beta) , 84.5 (alpha) kDa



Immunocytochemistry/ Immunofluorescence - Anti-Hsp90 antibody (ab13495)

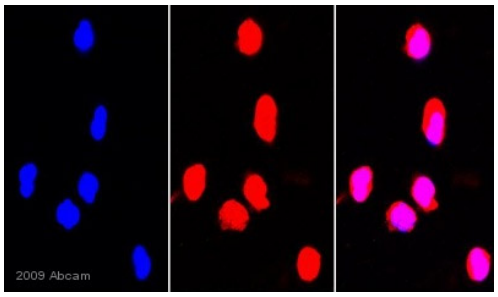
Image courtesy of Dr Mahesh Shivananjappa by Abreview.

ab13495 staining Hsp90 in murine RAW 264 (ab7187).7 cells by Immunocytochemistry/ Immunofluorescence.Cells were fixed in paraformaldehyde, permeabilized using 0.1% Triton-X100 in 2% BSA for 15 minutes, blocked with 2% BSA for 1 hour at 4°C and then incubated with ab13495 at a 1/150 dilution. The secondary used was an Alexa-Fluor 488 conjugated chicken anti-rabbit IgG (H+L) used at a 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp90 antibody (ab13495)

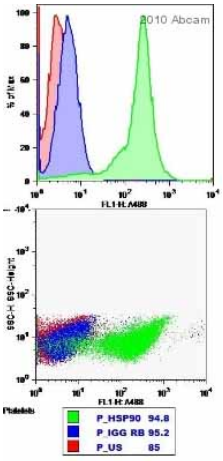
ab13495 staining Hsp90 in Mouse backskin tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with Bouin's fixative solution. Samples were incubated with primary antibody (1/100) for 1 hour at room temperature. A FITC-conjugated Goat anti-rabbit IgG polyclonal (1/50) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Hsp90 antibody (ab13495)

This image was kindly supplied by Dr Mahesh Shivananjappa by Abreview

ab13495 at a 1/100 dilution staining Hsp90 in human PMN cells by Immunocytochemistry/ Immunofluorescence incubated for 4 hours at 37°C. PFA fixed. Blocked using 2% BSA for 1 hour at 22°C. Secondary used at 1/250 polyclonal Goat anti-rabbit IgG (H+L) conjugated to Alexa Fluor 568 (ab175471).Left image: DAPI staining nuclei (blue)Middle image: Hsp90 (red)Right image: Overlay

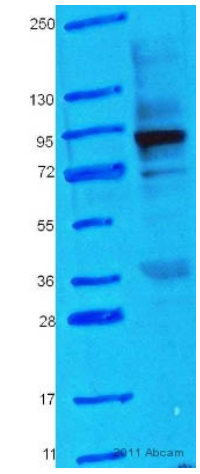


Flow Cytometry - Anti-Hsp90 antibody (ab13495)

Image courtesy of Dr Mahesh Shivananjappa by Abreview.

ab13495 staining Hsp90 in Human platelet cells by Flow cytometry. Cells were fixed in paraformaldehyde and permeabilized using 0.1% Triton-X-100 in 2% BSA for 15 minutes. Primary antibody used at a 1/250 dilution and incubated for 18 hours at 4°C. The secondary antibody used was an Alexa Fluor®488 conjugated chicken anti-rabbit IgG (H+L) at a 1/500 dilution.

P : Permeabilized; US : Unstained, Red Peak; IgG RB : IgG Rabbit (Isotype Control) ab171870), Blue Peak; HSP90, Green peak.



Western blot - Anti-Hsp90 antibody (ab13495)

Image courtesy of Dr Mahesh Shivananjappa by Abreview.

Anti-Hsp90 antibody (ab13495) at 1/1000 dilution + whole cell lysate prepared from human platelets treated with A23187 for 1 hour at 20 µg

Secondary

HRP conjugated goat anti-rabbit polyclonal at 1/10000 dilution

Developed using the ECL technique.

Predicted band size: 83.2 (beta) , 84.5 (alpha) kDa

Observed band size: 90 kDa

why is the actual band size different from the predicted?

Additional bands at: 36 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 5 minutes

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