

Product datasheet

Anti-Hsp90 beta antibody [K3705] ab82522

KO VALIDATED

★★★★★ [1 Abreviews](#) [4 References](#) [3 Images](#)

Overview

Product name	Anti-Hsp90 beta antibody [K3705]
Description	Mouse monoclonal [K3705] to Hsp90 beta
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human, Chinese hamster
Immunogen	Recombinant human Hsp90 beta protein
Positive control	WB: A431, Saos-2, HL-60, HeLa, PC-12 cells, CHO-K1 cells and 3T3 cells. IHC-P: Human pancreas FFPE tissue sections.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.1% Sodium azide
Purity	Ammonium Sulphate Precipitation
Clonality	Monoclonal
Clone number	K3705
Isotype	IgM

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab82522 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
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 83 kDa (predicted molecular weight: 83 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.

Post-translational modifications

Ubiquitinated in the presence of STUB1-UBE2D1 complex (in vitro).

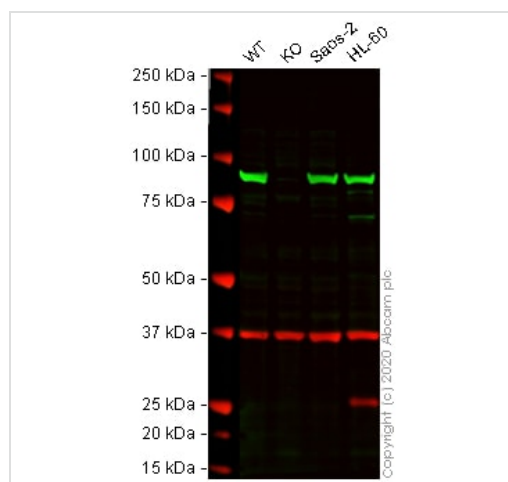
ISGylated.

S-nitrosylated; negatively regulates the ATPase activity.

Cellular localization

Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Western blot - Anti-Hsp90 beta antibody [K3705]
(ab82522)

All lanes : Anti-Hsp90 beta antibody [K3705] (ab82522) at 1/1000 dilution

Lane 1 : Wild-type A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 2 : HSP90AB1 knockout A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 3 : Saos-2 (Human osteosarcoma cell line) whole cell lysate

Lane 4 : HL-60 (Human promyelocytic leukemia cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

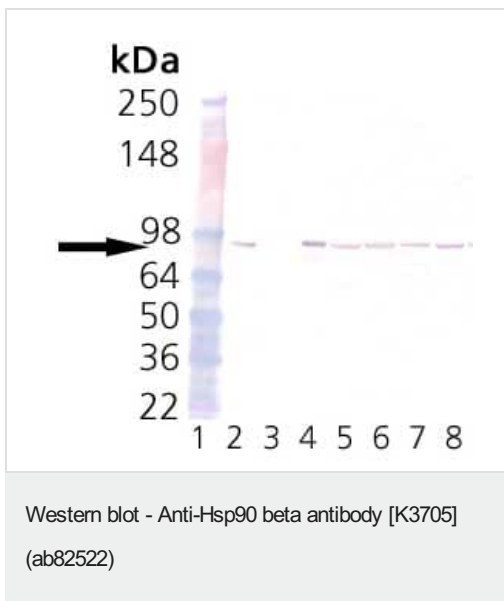
Performed under reducing conditions.

Predicted band size: 83 kDa

Observed band size: 85 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab82522 observed at 85 kDa. Red - loading control, **ab181602** (Rabbit Anti-GAPDH antibody [EPR16891]) observed at 37kDa.

ab82522 was shown to react with Hsp90 beta in wild-type A431 cells in western blot. Loss of signal was observed when HSP90AB1 knockout sample was used. Wild-type A431 and HSP90AB1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab82522 and **ab181602** (Rabbit Anti-GAPDH antibody [EPR16891]) overnight at 4°C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-Hsp90 beta antibody [K3705] (ab82522) at 1/1000 dilution

Lane 1 : Molecular weight markers

Lane 2 : Hsp90

Native Human Protein

Lane 3 : Hsp90 alpha Recombinant Human

Protein

Lane 4 : Hsp90 beta Recombinant Human Protein

Lane 5 : HeLa cells

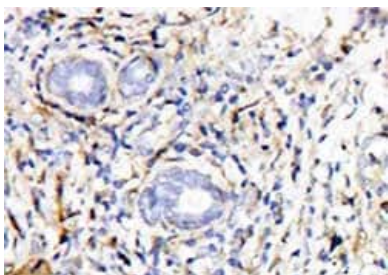
Lane 6 : PC-12 cells

Lane 7 : CHO-K1 cells

Lane 8 : 3T3 cells

Predicted band size: 83 kDa

Observed band size: 83 kDa



ab82522, at 1/50 dilution, staining Hsp90 beta in human breast cancer tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp90 beta antibody [K3705] (ab82522)

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