

Product datasheet

Anti-Hsp90 beta antibody [K3701] ab82584

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[3 Images](#)

Overview

Product name	Anti-Hsp90 beta antibody [K3701]
Description	Mouse monoclonal [K3701] to Hsp90 beta
Host species	Mouse
Tested applications	Suitable for: Flow Cyt (Intra), WB
Species reactivity	Reacts with: Rat, Human, Chinese hamster
Immunogen	Recombinant human Hsp90 beta protein
Positive control	WB: A431, Saos-2, HL-60, HeLa, PC12, CHO-K1 cell lysates; Hsp90 native protein. Flow Cyt (Intra): Human colon cancer Caco-2 cells.
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 repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.1% Sodium azide Constituent: PBS
Purity	Ammonium Sulphate Precipitation
Clonality	Monoclonal
Clone number	K3701
Isotype	IgM

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab82584 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
Flow Cyt (Intra)		Use a concentration of 10 µg/ml. ab91545 - Mouse monoclonal IgM, is suitable for use as an isotype control with this antibody.
WB		1/1000. Predicted molecular weight: 83 kDa. 1/1000 (colorimetric).

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).

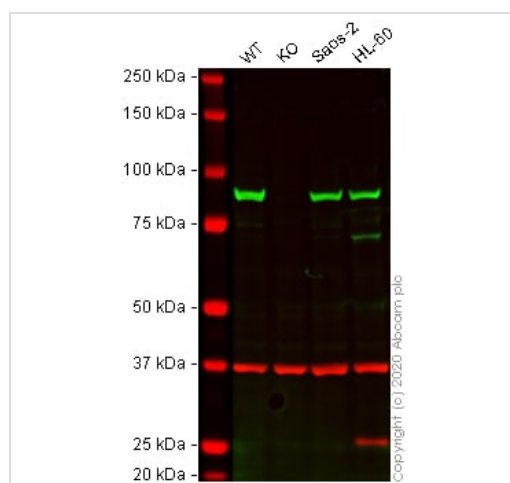
ISGylated.

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 [K3701]
(ab82584)

All lanes : Anti-Hsp90 beta antibody [K3701] (ab82584) 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.

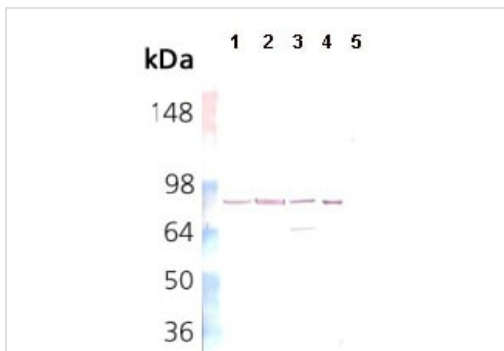
Performed under reducing conditions.

Predicted band size: 83 kDa

Observed band size: 85 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab82584 observed at 85 kDa. Red - loading control, **ab181602** (Rabbit Anti-GAPDH antibody [EPR16891]) observed at 37kDa.

ab82584 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 ab82584 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.



Western blot - Anti-Hsp90 beta antibody [K3701] (ab82584)

All lanes : Anti-Hsp90 beta antibody [K3701] (ab82584) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : PC12 cell lysate

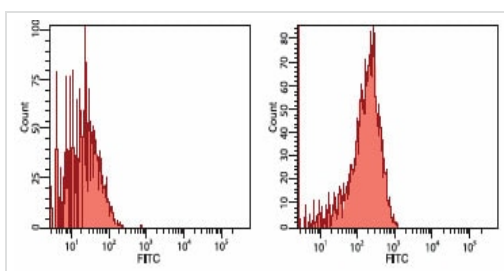
Lane 3 : CHO-K1 cell lysate

Lane 4 : Hsp90 Native Protein

Lane 5 : Hsp90 alpha Recombinant Protein (negative control)

Predicted band size: 83 kDa

Observed band size: 83 kDa



Flow Cytometry (Intracellular) - Anti-Hsp90 beta antibody [K3701] (ab82584)

ab82584, at 10 µg/ml, staining p90 beta in human colon cancer Caco-2 cells by flow cytometry (right). Isotype control antibody (left).

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