

Product datasheet

Anti-Hsp90 antibody [EPR3953] ab109248

Recombinant RabMAb

6 References 5 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-Hsp90 antibody [EPR3953] |
| Description | Rabbit monoclonal [EPR3953] to Hsp90 |
| Host species | Rabbit |
| Specificity | The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. |
| Tested applications | Suitable for: WB, IHC-P Unsuitable for: Flow Cyt or IP |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide corresponding to Human Hsp90. |
| Positive control | WB: Hsp90 alpha and beta recombinant proteins and HeLa and 293T cell lysates IHC-P: Human gastric adenocarcinoma tissue, Human lung carcinoma and Human kidney tissue |
| General notes | This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . |

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in

our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. |
| Storage buffer | pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine) |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR3953 |
| Isotype | IgG |

Applications

Our [Abpromise guarantee](#) covers the use of **ab109248** 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 |
|-------------|-----------|---|
| WB | | 1/1000 - 1/10000. Detects a band of approximately 90 kDa (predicted molecular weight: 85 kDa). |
| IHC-P | | 1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. See IHC antigen retrieval protocols . For unpurified use at 1/100 - 1/250. |

| | |
|--------------------------|-----------------------------------|
| Application notes | Is unsuitable for Flow Cyt or IP. |
|--------------------------|-----------------------------------|

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

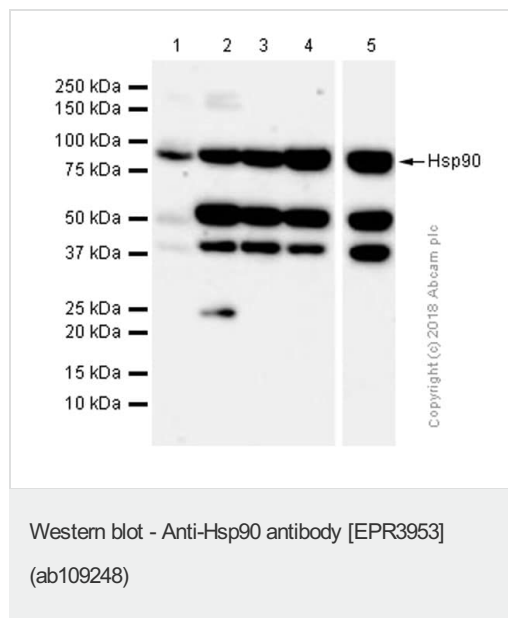
ISGylated.

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



All lanes : Anti-Hsp90 antibody [EPR3953] (ab109248) at 1/1000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates

Lane 3 : RAW264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysates

Lane 4 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

Lane 5 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates

Lysates/proteins at 20 µg per lane.

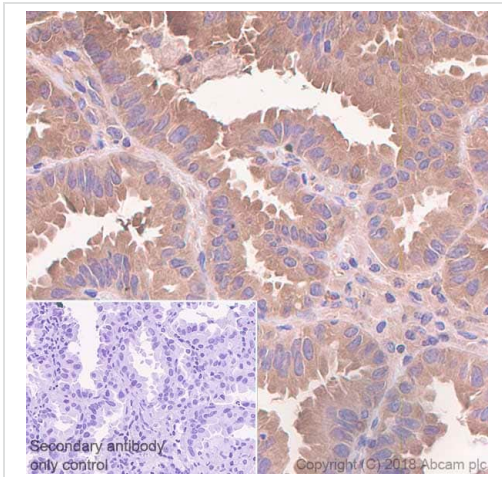
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 85 kDa

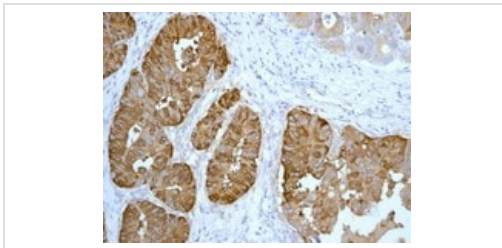
Observed band size: 90 kDa

[why is the actual band size different from the predicted?](#)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling Hsp90 with purified ab109248 at 1:50 dilution (19.42 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

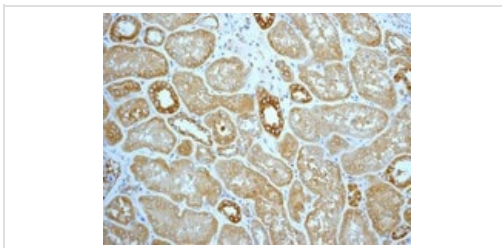
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp90 antibody [EPR3953] (ab109248)



ab109248, at 1/100, staining Hsp90 in paraffin-embedded Human gastric adenocarcinoma tissue by Immunohistochemistry.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

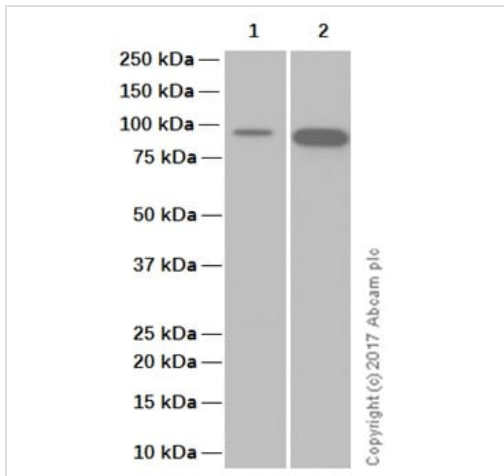
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp90 antibody [EPR3953] (ab109248)



ab109248, at 1/100, staining Hsp90 in paraffin-embedded Human kidney tissue by Immunohistochemistry.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp90 antibody [EPR3953] (ab109248)



Western blot - Anti-Hsp90 antibody [EPR3953] (ab109248)

All lanes : Anti-Hsp90 antibody [EPR3953] (ab109248) at 1/1000 dilution

Lane 1 : Recombinant Human Hsp90 alpha protein (His tag) (ab48801)

Lane 2 : Recombinant human Hsp90 beta protein (Active) (ab80033)

Lysates/proteins at 0.015 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 85 kDa

Observed band size: 90 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 5 seconds

Blocking and dilution buffer: 5% NFDm/TBST.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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