abcam

Product datasheet

Anti-Hsp90 antibody [EPR3953] ab109248

Recombinant RabMAb

7 References 6 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. This information is proprietary to Abcam and/or its suppliers.

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:

- 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**.

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

The Abpromise guarantee

Our <u>Abpromise guarantee</u> 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 similaritiesBelongs 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 ISGylated.

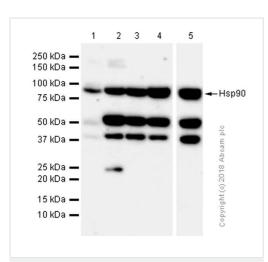
modifications S-nitrosylated; negatively regulates the ATPase activity and the activation of eNOS by

HSP90AA1.

Cellular localization Cytoplasm. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I

to stage IV.

Images



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

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

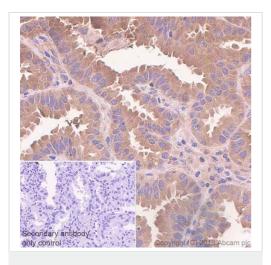
Lane 4 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysatesLane 5 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates

Lysates/proteins at 20 µg per lane.

Secondary

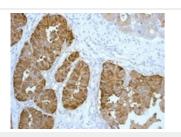
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 85 kDa **Observed band size:** 90 kDa



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

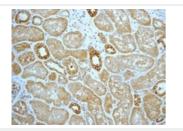
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling Hsp90 with purified ab109248 at 1:50 dilution (19.42 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step 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 paraffinembedded sections) - Anti-Hsp90 antibody
[EPR3953] (ab109248)

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

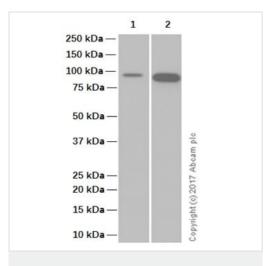
Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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.



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.

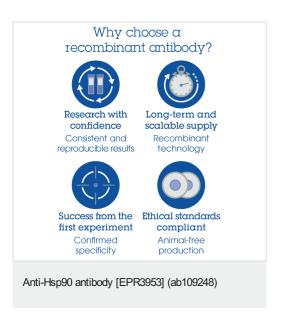
Secondary

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

Predicted band size: 85 kDa **Observed band size:** 90 kDa

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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