

**Hsp90 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AP52820****Specification**

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**Hsp90 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P07900</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	90 KDa

**Hsp90 Antibody - Additional Information****Gene ID** 3320**Other Names**

D6S182;FLJ26984;FLJ31884;Heat shock 86 kDa;heat shock 90kDa protein 1 alpha;Heat shock protein 90kDa alpha cytosolic class A member 1;Heat shock protein 90kDa alpha cytosolic class B member 1; Heat shock protein HSP 90 alpha;Heat shock protein HSP 90 beta;Heat shock protein HSP 90-alpha;HS90A\_HUMAN;HSP 84;HSP 86;Hsp 90;HSP84;HSP86;Hsp89;Hsp90;HSP90 Beta;HSP90A;HSP90AA1;HSP90AB1;HSP90B;HSP90N;HSPC1;HSPC2;HSPCA;HSPCAL1;HSPCAL4;HSPCB;HSPN;LAP2;Lipopolysaccharide associated protein2;LPS associated protein 2;NY REN 38 antigen;Renal carcinoma antigen NY-REN-38.

**Dilution**

WB~~1:2000

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

**Storage**

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

**Hsp90 Antibody - Protein Information****Name** HSP90AA1 ([HGNC:5253](#))**Synonyms** HSP90A, HSPC1, HSPCA**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 which is essential for its chaperone 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 (PubMed:<a href="http://www.uniprot.org/citations/11274138" target="\_blank">11274138</a>, PubMed:<a href="http://www.uniprot.org/citations/12526792" target="\_blank">12526792</a>, PubMed:<a href="http://www.uniprot.org/citations/15577939" target="\_blank">15577939</a>, PubMed:<a href="http://www.uniprot.org/citations/15937123" target="\_blank">15937123</a>, PubMed:<a href="http://www.uniprot.org/citations/27353360" target="\_blank">27353360</a>, PubMed:<a href="http://www.uniprot.org/citations/29127155" target="\_blank">29127155</a>). Engages with a range of client protein classes via its interaction with various co-chaperone proteins or complexes, that act as adapters, simultaneously able to interact with the specific client and the central chaperone itself (PubMed:<a href="http://www.uniprot.org/citations/29127155" target="\_blank">29127155</a>). Recruitment of ATP and co-chaperone followed by client protein forms a functional chaperone. After the completion of the chaperoning process, properly folded client protein and co- chaperone leave HSP90 in an ADP-bound partially open conformation and finally, ADP is released from HSP90 which acquires an open conformation for the next cycle (PubMed:<a href="http://www.uniprot.org/citations/26991466" target="\_blank">26991466</a>, PubMed:<a href="http://www.uniprot.org/citations/27295069" target="\_blank">27295069</a>). Plays a critical role in mitochondrial import, delivers preproteins to the mitochondrial import receptor TOMM70 (PubMed:<a href="http://www.uniprot.org/citations/12526792" target="\_blank">12526792</a>). Apart from its chaperone activity, it also plays a role in the regulation of the transcription machinery. HSP90 and its co-chaperones modulate transcription at least at three different levels (PubMed:<a href="http://www.uniprot.org/citations/25973397" target="\_blank">25973397</a>). In the first place, they alter the steady-state levels of certain transcription factors in response to various physiological cues (PubMed:<a href="http://www.uniprot.org/citations/25973397" target="\_blank">25973397</a>). Second, they modulate the activity of certain epigenetic modifiers, such as histone deacetylases or DNA methyl transferases, and thereby respond to the change in the environment (PubMed:<a href="http://www.uniprot.org/citations/25973397" target="\_blank">25973397</a>). Third, they participate in the eviction of histones from the promoter region of certain genes and thereby turn on gene expression (PubMed:<a href="http://www.uniprot.org/citations/25973397" target="\_blank">25973397</a>). Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:<a href="http://www.uniprot.org/citations/11276205" target="\_blank">11276205</a>). Antagonizes STUB1-mediated inhibition of TGF-beta signaling via inhibition of STUB1-mediated SMAD3 ubiquitination and degradation (PubMed:<a href="http://www.uniprot.org/citations/24613385" target="\_blank">24613385</a>). Mediates the association of TOMM70 with IRF3 or TBK1 in mitochondrial outer membrane which promotes host antiviral response (PubMed:<a href="http://www.uniprot.org/citations/20628368" target="\_blank">20628368</a>, PubMed:<a href="http://www.uniprot.org/citations/25609812" target="\_blank">25609812</a>).

### Cellular Location

Nucleus {ECO:0000250|UniProtKB:P07901}. Cytoplasm {ECO:0000250|UniProtKB:P07901}. Melanosome. Cell membrane. Mitochondrion. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

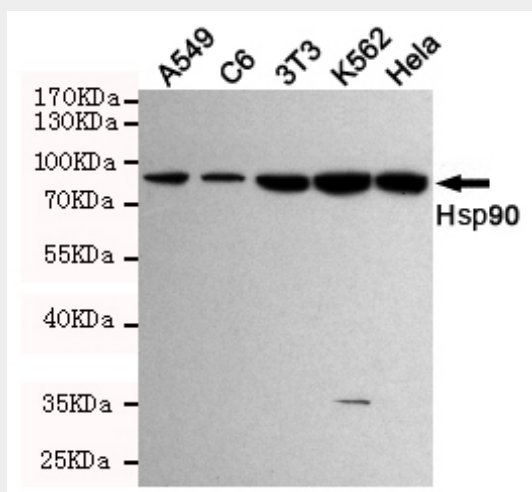
### Hsp90 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

## Hsp90 Antibody - Images



Western blot detection of Hsp90 in HeLa, 3T3, C6, K562 and A549 cell lysates using Hsp90 mouse mAb (1:2000 diluted). Exposure time: 4min. Predicted band size: 90KDa. Observed band size: 90KDa.

## Hsp90 Antibody - Background

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## Hsp90 Antibody - References

- Soeda E., et al. Nucleic Acids Res. 17:7108-7108(1989).  
Yamazaki M., et al. Agric. Biol. Chem. 54:3163-3170(1990).  
Hickey E., et al. Mol. Cell. Biol. 9:2615-2626(1989).  
Chen B., et al. Genomics 86:627-637(2005).  
Ota T., et al. Nat. Genet. 36:40-45(2004).