

**Hsp90 beta Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AP52821**

**Specification**

---

**Hsp90 beta Antibody - Product Information**

Application	IP, WB, ICC
Primary Accession	<a href="#">P08238</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	90 KDa

**Hsp90 beta Antibody - Additional Information**

**Gene ID** 3326

**Other Names**

HSP90AB1;90 kda heat shock protein beta HSP90 beta;D6S182;FLJ26984;Heat shock 84 kDa;Heat shock 90kD protein 1, beta;Heat shock 90kDa protein 1 beta;Heat shock protein 90kDa alpha (cytosolic) class B member 1;Heat shock protein beta;Heat shock protein HSP 90 beta;Heat shock protein HSP 90-beta;HS90B\_HUMAN;HSP 84;HSP 90;HSP 90 b;HSP 90b;HSP84;HSP90 BETA;hsp90ab1;HSP90B;HSPC2;HSPCB.

**Dilution**

IP~~1:500  
WB~~1:2000  
ICC~~1:200

**Format**

Purified mouse monoclonal in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**Hsp90 beta Antibody - Protein Information**

**Name** HSP90AB1 ([HGNC:5258](#))

**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 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 (PubMed:<a href="http://www.uniprot.org/citations/16478993">

target="\_blank">16478993</a>, PubMed:<a href="http://www.uniprot.org/citations/19696785" target="\_blank">19696785</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. 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>). 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. They first alter the steady-state levels of certain transcription factors in response to various physiological cues. 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. 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>). 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>). Promotes cell differentiation by chaperoning BIRC2 and thereby protecting from auto-ubiquitination and degradation by the proteasomal machinery (PubMed:<a href="http://www.uniprot.org/citations/18239673" target="\_blank">18239673</a>). Main chaperone involved in the phosphorylation/activation of the STAT1 by chaperoning both JAK2 and PRKCE under heat shock and in turn, activates its own transcription (PubMed:<a href="http://www.uniprot.org/citations/20353823" target="\_blank">20353823</a>). Involved in the translocation into ERGIC (endoplasmic reticulum-Golgi intermediate compartment) of leaderless cargos (lacking the secretion signal sequence) such as the interleukin 1/IL-1; the translocation process is mediated by the cargo receptor TMED10 (PubMed:<a href="http://www.uniprot.org/citations/32272059" target="\_blank">32272059</a>).

### Cellular Location

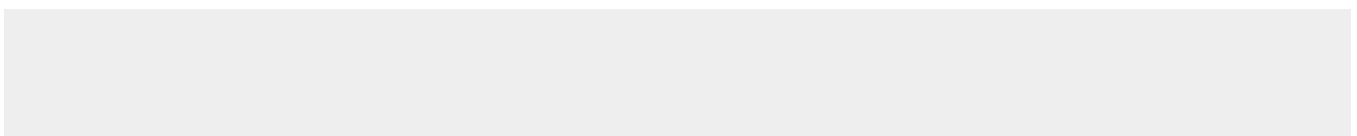
Cytoplasm. Melanosome Nucleus. Secreted. Cell membrane. Dynein axonemal particle {ECO:0000250|UniProtKB:Q6AZV1}. Cell surface. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065) Translocates with BIRC2 from the nucleus to the cytoplasm during differentiation (PubMed:18239673). Secreted when associated with TGFB1 processed form (LAP) (PubMed:20599762).

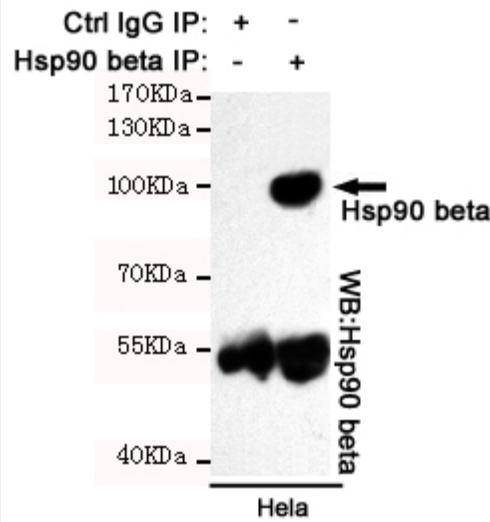
### Hsp90 beta Antibody - Protocols

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

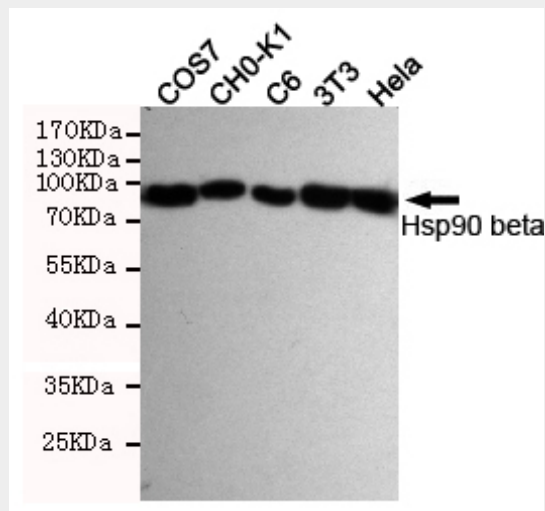
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Hsp90 beta Antibody - Images

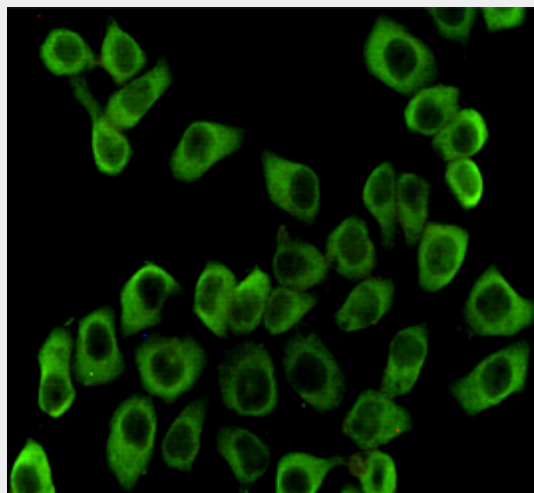




Immunoprecipitation analysis of HeLa cell lysates using Hsp90 beta mouse mAb.



Western blot detection of Hsp90 beta in HeLa, 3T3, C6, CHO-K1 and COS7 cell lysates using Hsp90 beta mouse mAb (1:2000 diluted). Exposure time: 4min. Predicted band size: 90KDa. Observed band size: 90KDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using Hsp90 beta mouse mAb.

anti-Hsp90 beta mouse mAb (dilution 1:200).

### **Hsp90 beta Antibody - Background**

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.

### **Hsp90 beta Antibody - References**

Rebbe N.F.,et al.Gene 53:235-245(1987).  
Rebbe N.F.,et al.J. Biol. Chem. 264:15006-15011(1989).  
Hoffmann T.,et al.Gene 74:491-501(1988).  
Lu L.,et al.Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.  
Wiemann S.,et al.Genome Res. 11:422-435(2001).