

## **HSP90** beta Antibody

Catalog # ASM10432

# **Specification**

# **HSP90** beta Antibody - Product Information

Application WB, IHC, IP, ICC

Primary Accession
Other Accession
Host
P08238
NP\_031381.2
Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal

**Description** 

Rabbit Anti-Human HSP90 beta Polyclonal

Target/Specificity

Detects ~90kda. Does not cross-react with HSP90α.

#### **Other Names**

HSP84 Antibody, HSP90 Antibody, HSP86 Antibody, HSP89 Antibody, HSP90B Antibody, HSP90BETA Antibody, HSP90N Antibody, HSPC2 Antibody, HSPCA Antibody, HSPCAL1 Antibody, HSPCB Antibody, HSPN Antibody, LAP2 Antibody, NY REN 38 antigen Antibody

### **Immunogen**

Full length protein HSP90

#### **Purification**

Peptide Affinity Purified

Storage -20°C

**Storage Buffer** 

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature Blue Ice or 4°C

**Certificate of Analysis** 

A 1:1000 dilution of SPC-177 was sufficient for detection of HSP90 in 20  $\mu g$  of HeLa cell lysate by ECL immunoblot analysis.

**Cellular Localization** 

Cytoplasm | Melanosome

### **HSP90** beta Antibody - Protocols

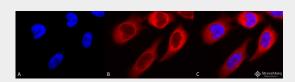
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence

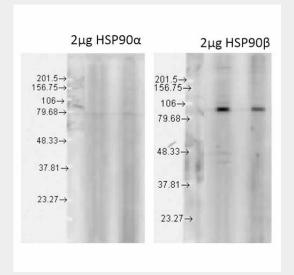


- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

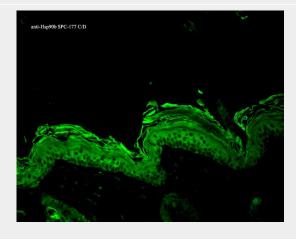
## **HSP90** beta Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Hsp90 beta Polyclonal Antibody (ASM10432). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Hsp90 beta Polyclonal Antibody (ASM10432) at 1:120 for 12 hours at 4°C. Secondary Antibody: APC Goat Anti-Rabbit (red) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Melanosome. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp90 beta Antibody. (C) Composite.



Western blot analysis of Human Cell line lysates showing detection of HSP90 beta protein using Rabbit Anti-HSP90 beta Polyclonal Antibody (ASM10432). Load: 15  $\mu$ g protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rabbit Anti-HSP90 beta Polyclonal Antibody (ASM10432) at 1:1000 for 2 hours at RT. Secondary Antibody: Donkey Anti-Rabbit IgG: HRP for 1 hour at RT. Left: 2 ug of Hsp90 Alpha, Right: 2 ug Hsp90 Beta.

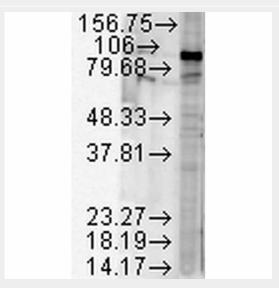




Immunohistochemistry analysis using Rabbit Anti-HSP90 beta Polyclonal Antibody (ASM10432). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative Solution. Primary Antibody: Rabbit Anti-HSP90 beta Polyclonal Antibody (ASM10432) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:50 for 1 hour at RT. Localization: Cytoplasm.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Hsp90 beta Polyclonal Antibody (ASM10432). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Hsp90 beta Polyclonal Antibody (ASM10432) at 1:120 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Melanosome. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp90 beta Antibody. (C) Composite.

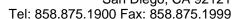


Western blot analysis of Human Cell line lysates showing detection of HSP90 beta protein using Rabbit Anti-HSP90 beta Polyclonal Antibody (ASM10432). Load: 15  $\mu$ g protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rabbit Anti-HSP90 beta Polyclonal Antibody (ASM10432) at 1:2000 for 2 hours at RT. Secondary Antibody: Donkey Anti-Rabbit IgG: HRP for 1 hour at RT.

## **HSP90** beta Antibody - Background

HSP90 is a highly conserved and essential stress protein that is expressed in all eukaryotic cells. From a functional perspective, HSP90 participates in the folding, assembly, maturation, and stabilization of specific proteins as an integral component of a chaperone complex (1-4). Despite its label of being a heat-shock protein, HSP90 is one of the most highly expressed proteins in unstressed cells (1-2% of cytosolic protein). It carries out a number of housekeeping functions – including controlling the activity, turnover, and trafficking of a variety of proteins. Most of the HSP90-regulated proteins that have been discovered to date are involved in cell signaling (5-6). The number of proteins now know to interact with HSP90 is about 100. Target proteins include the kinases v-Src, Wee1, and c-Raf, transcriptional regulators such as p53 and steroid receptors, and the polymerases of the hepatitis B virus and telomerase.5. When bound to ATP, HSP90 interacts with co-chaperones Cdc37, p23, and an assortment of immunophilin-like proteins, forming a complex that stabilizes and protects target proteins from proteasomal degradation. In most cases, HSP90-interacting proteins have been shown to co-precipitate with HSP90 when carrying out immunoadsorption studies, and to exist in cytosolic heterocomplexes with it. In a number of cases, variations in HSP90 expression or HSP90 mutation has been shown to degrade







signaling function via the protein or to impair a specific function of the protein (such as steroid binding, kinase activity) in vivo. Ansamycin antibiotics, such as geldanamycin and radicicol, inhibit HSP90 function (7). Looking for more information on HSP90? Visit our new HSP90 Scientific Resource Guide at http://www.HSP90.ca.

## **HSP90** beta Antibody - References

- 1. Arlander S.J.H., et al. (2003) J Biol Chem. 278: 52572-52577.
- 2. Pearl H., et al. (2001) Adv Protein Chem. 59:157-186.
- 3. Neckers L., et al. (2002) Trends Mol Med. 8:S55-S61.
- 4. Pratt W., Toft D. (2003) Exp Biol Med. 228:111-133.
- 5. Pratt W., Toft D. (1997) Endocr Rev. 18: 306-360.
- 6. Pratt W.B. (1998) Proc Soc Exptl Biol Med. 217: 420-434.
- 7. Whitesell L., et al. (1994) Proc Natl Acad Sci USA. 91: 8324-8328.