

### **HSP90 Antibody**

HSP90 Antibody, Clone D7A Catalog # ASM10053

# **Specification**

# **HSP90 Antibody - Product Information**

Application IHC, WB Primary Accession P11501

Other Accession NP\_001103255.1

Host Mouse Isotype IgG

Reactivity Human, Mouse, Rat, Rabbit, Pig, Chicken,

Clonality Monoclonal Format Biotin

**Description** 

Mouse Anti-Chicken HSP90 Monoclonal IgG

# **Target/Specificity**

Recognizes 90kDa. Can isolate complexes of HSP90, Src kinase and cec37.

#### **Other Names**

HSP86 Antibody, HSP89A Antibody, HSP90A Antibody, HSP90AA1 Antibody, HSPC1 Antibody, HSPCA Antibody, HSPCA Antibody

#### **Immunogen**

Full length protein HSP90 purified from chicken brain

### Purification

Protein G Purified

Storage -20°C

**Storage Buffer** 

PBS pH7.2, 50% glycerol, 0.09% sodium azide

Shipping Temperature Blue Ice or 4°C

**Certificate of Analysis** 

 $2~\mu g/ml$  was sufficient for detection of HSP90 $\alpha$  in 20  $\mu g$  of heat shocked HeLa cell lysate as well as in 100 ng of human HSP90 $\alpha$  protein by colorimetric immunoblot analysis using Goat Anti-Mouse IgG:HRP as the secondary.

**Cellular Localization** 

Cytoplasm | Melanosome

# **HSP90 Antibody - Protocols**

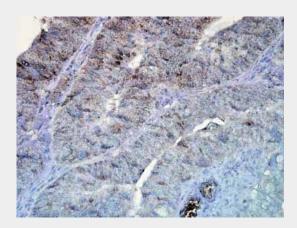
Provided below are standard protocols that you may find useful for product applications.

Western Blot

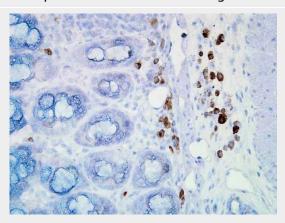


- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **HSP90 Antibody - Images**

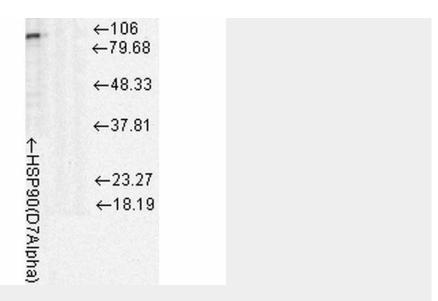


Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone D7alpha (ASM10053). Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody (ASM10053) at 1:100000 for 12 hours at 4°C. Secondary Antibody: Biotin Goat Anti-Mouse at 1:2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 µl for 2 minutes at RT. Magnification: 40x.



Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone D7alpha (ASM10053). Tissue: inflamed colon. Species: Mouse. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody (ASM10053) at 1:100000 for 12 hours at 4°C. Secondary Antibody: Biotin Goat Anti-Mouse at 1:2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200  $\mu l$  for 2 minutes at RT. Localization: Inflammatory cells. Magnification: 40x.





Western Blot analysis of Rat cell lysates showing detection of Hsp90 protein using Mouse Anti-Hsp90 Monoclonal Antibody, Clone D7Alpha (ASM10053). Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody (ASM10053) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

# **HSP90 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 (4-7). 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 (8-9). The number of proteins now known 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(6). 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 immune-adsorption 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 (10). For more information visit our HSP90 Scientific Resource Guide at http://www.HSP90.ca.

# **HSP90 Antibody - References**

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- 2. Lipsich L.A., Cutt J.R. and Brugge J.S. (1982) Mol. Cell Biol. 2(7): 875-880.
- 3. Brugge J.S., Yonemoto W., and Darrow D. (1983) Mol. Cell. Biol. 3(1): 9-19.
- 4. Arlander SJH, et al. (2003) J Biol Chem 278: 52572-52577.
- 5. Pearl H, et al. (2001) Adv Protein Chem 59: 157-186.
- 6. Neckers L, et al. (2002) Trends Mol Med 8:S55-S61.
- 7. Pratt W, Toft D. (2003) Exp Biol Med 228:111-133.
- 8. Pratt W, Toft D. (1997) Endocr Rev 18: 306-360.
- 9. Pratt WB. (1998) Proc Soc Exptl Biol Med 217: 420-434.
- 10. Whitesell L, et al. (1994) Proc Natl Acad Sci USA 91: 8324-8328.