

HSP90 Antibody
HSP90 Antibody, Clone AC-16
Catalog # ASM10020**Specification**

HSP90 Antibody - Product Information

Application	WB, IHC
Primary Accession	Q8LLI5
Other Accession	AAM90675.1
Host	Mouse
Isotype	IgG2b
Reactivity	Human, Mouse, Rat, Rabbit, Chicken, Fungi
Clonality	Monoclonal

Description

Mouse Anti-Water Mold HSP90 Monoclonal IgG2b

Target/Specificity

Detects 90kDa. This antibody is reactive with both the constitutive and the inducible form of HSP90. It does not bind to the native form and does not recognize HSP90 from E.coli or yeast.

Other Names

HSP84 Antibody, HSP86 Antibody, HSP90 Antibody, HSP89 Antibody, HSP90Beta Antibody, HSP90A Antibody, HSP90AA1 Antibody, HSP90AB1 Antibody, HSP90B Antibody, HSP90N Antibody, HSPC1 Antibody, HSPC2 Antibody, HSPCA Antibody, HSPCAL1 Antibody, HSPCAL4 Antibody, HSPCB Antibody, HSPN Antibody, LAP2 Antibody

Immunogen

Heat shock protein 90 from the water mold *Achyla ambisexualis*

Purification

Protein G 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

1 µg/ml of SMC-112 was sufficient for detection of HSP90 in 20 µg of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody

Cellular Localization

Cytoplasm | Melanosome

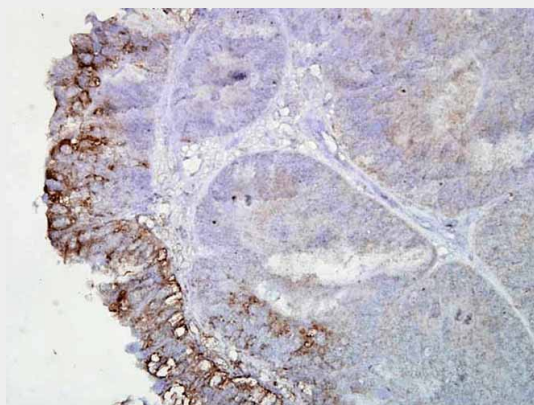
HSP90 Antibody - Protocols

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

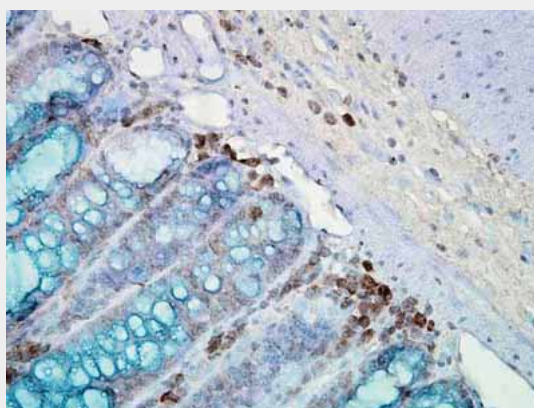
- [Western Blot](#)

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

HSP90 Antibody - Images



Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone AC-16 (ASM10020). Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody (ASM10020) at 1:2000 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. Localization: Inflammatory cells. Magnification: 40x.



Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone AC-16 (ASM10020). Tissue: inflamed colon. Species: Mouse. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody (ASM10020) at 1:2000 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. Localization: Inflammatory cells. Magnification: 40x.

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 (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 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 (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 immuno-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 (7). For more information visit our HSP90 Scientific Resource Guide at <http://www.HSP90.ca>.

HSP90 Antibody - References

1. Arlander SJH, 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 WB. (1998) *Proc Soc Exptl Biol Med* 217: 420-434.
7. Whitesell L, et al. (1994) *Proc Natl Acad Sci USA* 91: 8324-8328.