

Mouse HSP90 Monoclonal Antibody | anti-HSP90 antibody

HSP90 Antibody

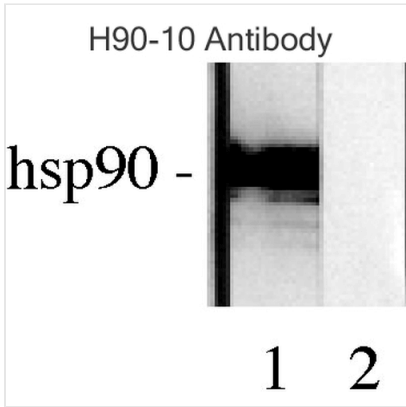
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA27660	Mouse	Human, Mouse, Rat, Rabbit, Chicken, Dog, Fish, Shark, Hamster	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Immunoprecipitation, ELISA

PRODUCT SYNONYMS

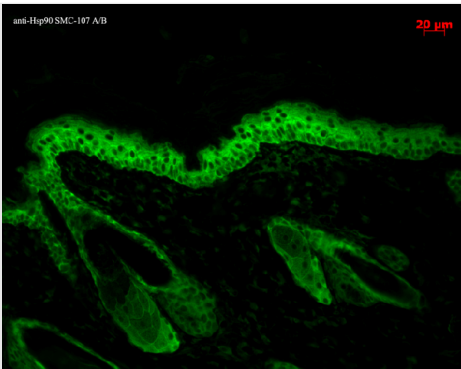
HSP90; Monoclonal Antibody; HSP90 Antibody; Mouse Anti-Human HSP90 Monoclonal IgG2a; Clone H9010; HSP84 Antibody; HSP90 beta Antibody; HSP90B Antibody; HSPC2 Antibody; HSPCB Antibody; anti-HSP90 antibody

PRODUCT SPECIFICATIONS

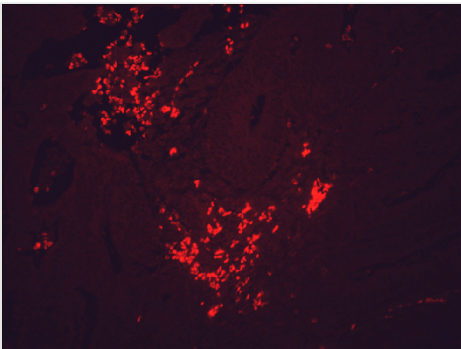
Host	Mouse
Reactivity	Human, Mouse, Rat, Rabbit, Chicken, Dog, Fish, Shark, Hamster
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	H9010
Specificity	Detects 90kDa. Detects HSP90 beta in all reactive species except in Chicken, where it detects both alpha and beta isoforms.
Purity/Purification	Protein G Purified
Form/Format	PBS pH 7.2, 50% glycerol, 0.09% Sodium Azide
Concentration	1 mg/ml (varies by lot)
Sequence Length	724
Applicable Applications for anti-HSP90 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), IP (Immunoprecipitation), ELISA, AM (Antibody Microarray)
Application Notes	WB: 1:2500 IHC: 1:100
Immunogen	Recombinant human HSP90beta
Immunogen Species	Human
Conjugate	Unconjugated
Cellular Localization	Cytoplasm, Melanosome
Certificate of Analysis	1 ug/ml of SMC-107 was sufficient for detection of HSP90beta in 20 ug of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Preparation and Storage	Store at -20 degree C.



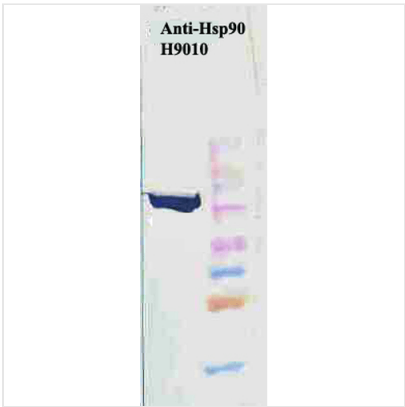
WB (Western Blot)
Western blot analysis of Human Lysates showing detection of Hsp90 protein using Mouse Anti-Hsp90 Monoclonal Antibody, Clone H9010 . Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody at 1:1000. Comparison of clone H9010 behavior with Hsp90 human beta (1) and Hsp90 human alpha (2). Courtesy of: David Toft, Mayo Clinic.



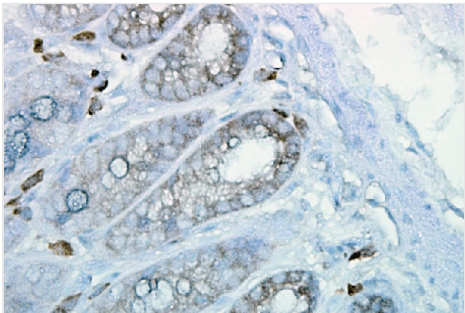
IHC (Immunohistochemistry)
Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone H9010 . Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Epidermis.



IHC (Immunohistochemistry)
Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone H9010 . Tissue: colon carcinoma. Species: Human. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody at 1:10000 for 12 hours at 4 degree C. Secondary Antibody: Alexa Fluor 555 Goat Anti-Mouse (red) at 1:5000 for 1 hour at RT. Magnification: 40x.



WB (Western Blot)
Western Blot analysis of Human Cervical cancer cell line (HeLa) lysate showing detection of Hsp90 protein using Mouse Anti-Hsp90 Monoclonal Antibody, Clone H9010 . Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody at 1:1000. Secondary Antibody: HRP Goat Anti-Mouse.



IHC (Immunohistochemistry)
Immunohistochemistry analysis using Mouse Anti-Hsp90 Monoclonal Antibody, Clone H9010 . Tissue: inflamed colon. Species: Mouse. Fixation: Formalin. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody at 1:10000 for 12 hours at 4 degree C. Secondary Antibody: Biotin Goat Anti-Mouse at 1:2000 for 1 hour at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 200 ul for 2 minutes at RT. Localization: Inflammatory cells. Magnification: 40x.



WB (Western Blot)
Western Blot analysis of Human cell lysates from various cell lines showing detection of Hsp90 protein using Mouse Anti-Hsp90 Monoclonal Antibody, Clone H9010 . Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Hsp90 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

ADDITIONAL INFORMATION

Related Product Information for anti-HSP90 antibody	HSP90 is an abundantly and ubiquitously expressed heat shock protein. It is understood to exist in two principal forms alpha and beta, which share 85% sequence amino acid homology. The two isoforms of HSP90, are expressed in the cytosolic compartment. Despite the similarities, HSP90 alpha exists predominantly as a homodimer while HSP90beta exists mainly as a monomer. From a functional perspective, HSP90 participates in the folding, assembly, maturation, and stabilization of specific proteins as an integral component of a chaperone complex. Furthermore, HSP90 is highly conserved between species; having 60% and 78% amino acid similarity between mammalian and the corresponding yeast and Drosophila proteins, respectively. HSP90 is a highly conserved and essential stress protein that is expressed in all eukaryotic cells. Despite it's 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. 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. 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.
Product Categories/Family for anti-HSP90 antibody	Cancer; Heat Shock; Cell Signaling; Protein Trafficking; Chaperone Proteins; Cancer; Tumor Biomarkers
References	1. Nemoto T., et al. (1997) J.Biol Chem. 272: 26179-26187. 2. Minami Y., et al. (1991), J.Biol Chem. 266: 10099-10103. 3. Arlander S.J.H., et al. (2003) J Biol Chem 278: 52572-52577. 4. Pearl H., et al. (2001) Adv Protein Chem 59:157-186. 5. Neckers L., et al. (2002) Trends Mol Med 8:S55-S61. 6. Pratt W., Toft D. (2003) Exp Biol Med 228:111-133. 7. Pratt W., Toft D. (1997) Endocr Rev 18:306-360. 8. Pratt W.B. (1998) Proc Soc Exptl Biol Med 217: 420-434. 9. Whitesell L., et al. (1994) Proc Natl Acad Sci USA 91: 8324-8328. 10. Barent R. L. (1998) Mol. Endocrinol. 12: 342-354 11. Lo. M.A. (1998) EMBO J. 17: 6879-6887.

NCBI AND UNIPROT INFORMATION

NCBI GI #	431822401
NCBI GeneID	3326
NCBI Accession #	NP_001258898.1
NCBI GenBank Nucleotide #	NM_001271969.1
UniProt Accession #	P08238
NCBI Official Full Name	heat shock protein HSP 90-beta isoform a
NCBI Official Synonym Full Names	heat shock protein 90 alpha family class B member 1
NCBI Official Symbol	HSP90AB1
NCBI Official Synonym Symbols	HSP84; HSPC2; HSPCB; D6S182; HSP90B
NCBI Protein Information	heat shock protein HSP 90-beta
UniProt Protein Name	Heat shock protein HSP 90-beta
UniProt Gene Name	HSP90AB1
UniProt Synonym Gene Names	HSP90B; HSPC2; HSPCB; HSP 90; HSP 84; HSP84
UniProt Entry Name	HS90B_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

