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HSP90 complex Antibody
Hsp90 complex Antibody, Clone 8D3
Catalog # ASM10014

Specification

HSP90 complex Antibody - Product Information

Application	**IP, ICC**
Primary Accession	P08238
Other Accession	NP_031381.2
Host	**Mouse**
Isotype	**IgM**
Reactivity	**Human, Mouse, Rat, Rabbit**
Clonality	**Monoclonal**

Description
Mouse Anti-Human HSP90 complex Monoclonal IgM

Target/Specificity
Detects 90kDa. Co-immunoprecipitates HSP90 complexes, including HSP70, Hop, Ah receptors, glucocorticoid receptors, heme-regulated eukaryotic initiation factor 2α (eIF-2α) kinase (HRI).

Other Names
HSP84 Antibody, HSP90 Antibody, HSP90 beta Antibody, HSP90B Antibody, HSPC2 Antibody, HSPCB Antibody, Heat shock protein HSP 90-beta Antibody, HSP 90 Antibody, Heat shock 84 kDa Antibody, HSP 84 Antibody, HSP84 Antibody, HSP90AB1 Antibody, HSP90B Antibody, HSPC2 Antibody, HSPCB Antibody

Immunogen
Ah receptor (Aryl hydrocarbon receptor)

Purification
PEG Purified

Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
Goat anti-mouse IgM was used to bind 25 µl of protein G-Sepharose. SMC-109 IgM from 0.5 ml of high speed supernatant medium was loaded onto the IgG resin and incubated with 100 µl of rabbit reticulocyte lysate for 30 min. at 30C. After washing (4X1 ml), bound proteins were resolved on SDS PAGE, including HSP90, HSP70 and Hop.

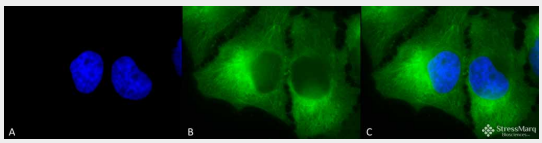
Cellular Localization
Cytoplasm | Melanosome

HSP90 complex Antibody - Protocols

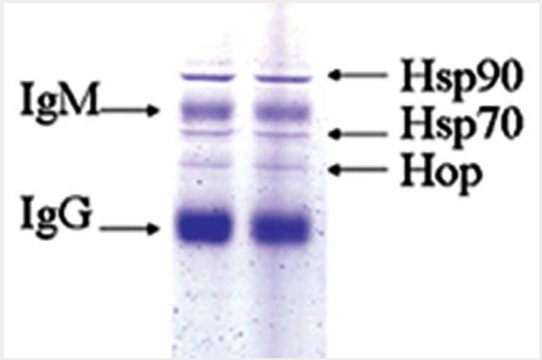
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

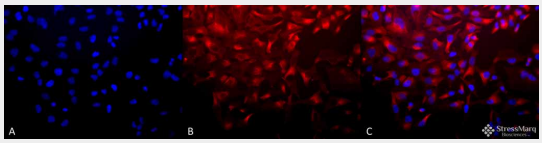
HSP90 complex Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Hsp90 complex Monoclonal Antibody, Clone 8D3 (ASM10014). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-Hsp90 complex Monoclonal Antibody (ASM10014) at 1:100 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Mouse (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: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp90 complex Antibody. (C) Composite.



Immunoprecipitation analysis using Mouse Anti-Hsp90 complex Monoclonal Antibody, Clone 8D3 (ASM10014). Tissue: reticulocyte lysate. Species: Rabbit. Primary Antibody: Mouse Anti-Hsp90 complex Monoclonal Antibody (ASM10014) at 1:1000.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Hsp90 complex Monoclonal Antibody, Clone 8D3 (ASM10014). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-Hsp90 complex Monoclonal Antibody (ASM10014) at 1:100 for 12 hours at 4°C. Secondary Antibody: APC Goat Anti-Mouse (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: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp90 complex Antibody. (C) Composite.

HSP90 complex 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). For more information visit our HSP90 Scientific Resource Guide at http://www.HSP90.ca.

HSP90 complex 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.
8. Perdew, G. H. (1988) JBC 263 (27): 13802-13805
9. Dalman, F. C. et al.(1989) JBC 264(33): 19815-19821
10. Uma, S. et al. (1997) JBC 272(17): 11648-11656.