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Hsp90 alpha Antibody
Hsp90 alpha Antibody, Clone M10E3R
Catalog # ASM10679

Specification

Hsp90 alpha Antibody - Product Information

Primary Accession	P07900
Other Accession	NP_001017963.2
Host	**Mouse**
Clonality	**Recombinant Monoclonal**

Target/Specificity
Hsp90 alpha

Other Names
HSP86 Antibody, HSP89A Antibody, HSP90A Antibody, HSP90AA1 Antibody, HSP90Alpha Antibody, HSPC1 Antibody, HSPCA Antibody, HSPCAL3 Antibody

Immunogen
Purified Human HSP90

Purification
Protein A Purified

Storage	**-20ºC**

Storage Buffer
PBS pH 7.4, 50% glycerol, 0.09% Sodium azide *Storage buffer may change when conjugated

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
A 1:1000 dilution of SMC-554 was sufficient for detection of HSP90a in 10 µg of HeLa by ECL immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasm | Melanosome

Hsp90 alpha 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 alpha Antibody - Images

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Hsp90 alpha Antibody - Background

HSP90 is an abundantly and ubiquitously expressed heat shock protein. It is understood to exist in two principal forms α and β, which share 85% sequence amino acid homology. The two isoforms of HSP90, are expressed in the cytosolic compartment (1). Despite the similarities, HSP90α exists predominantly as a homodimer while HSP90β exists mainly as a monomer (2). From a functional perspective, HSP90 participates in the folding, assembly, maturation, and stabilization of specific proteins as an integral component of a chaperone complex (3-6). 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 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 (7-8). 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 (9). For more information visit our HSP90 Scientific Resource Guide at http://www.HSP90.ca.

Hsp90 alpha Antibody - References

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2. Minami, Y, et al. (1991), J.Biol Chem. 266: 10099-10103.
3. Arlander SJH, et al. (2003) J Biol Chem. 278: 52572-52577.
4. Pearl H, et al. (2001) Adv Protein Chem. 59: 157-186.
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6. Pratt W, Toft D. (2003) Exp Biol Med. 228: 111-133.
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