

Product datasheet for TA326447

HSP90AA1 Mouse Monoclonal Antibody [Clone ID: D7A]

Product data:

Product Type:	Primary Antibodies
Clone Name:	D7A
Applications:	IHC, WB
Recommend Dilution:	WB: 1:500, IP: 5ug with 20ul Protein A beads
Reactivity:	Bovine, Chicken, Human, Mouse, Rabbit, Rat, Pig
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length protein Hsp90 purified from chicken brain
Formulation:	PBS, 50% glycerol, 0.09% sodium azide
Concentration:	1 mg/ml
Purification:	Protein G Purified
Gene Name:	heat shock protein 90kDa alpha family class A member 1
Database Link:	NP_001017963 Entrez Gene 15519 Mouse Entrez Gene 299331 Rat Entrez Gene 3320 Human



[View online »](#)

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. Despite its label of being a heat-shock protein, hsp90 is one of the most highly expressed proteins in unstressed cells (12% 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 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. 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-oadsorption 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.

Synonyms:

EL52; HSP86; Hsp89; HSP89A; Hsp90; HSP90A; HSP90N; HSPC1; HSPCA; HSPCAL1; HSPCAL4; HSPN; LAP-2; LAP2

Note:

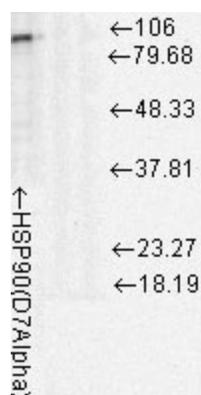
Recognizes 90kDa proteins corresponding to the molecular mass of Hsp90. Hsp90a specific for human samples. Can isolate complexes of Hsp90, Src kinase and cec37.

Protein Families:

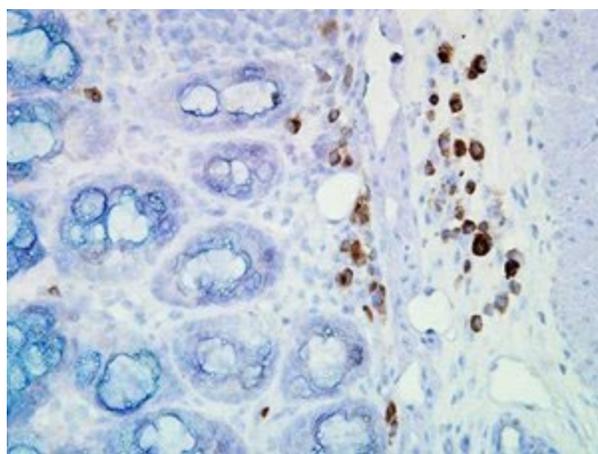
Druggable Genome

Protein Pathways:

Antigen processing and presentation, NOD-like receptor signaling pathway, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer

Product images:

Western blot analysis of Hsp90 in rat tissue lysates using a 1:1000 dilution of the antibody



IHC staining of inflammatory cells in mouse colon tissue.