

Product datasheet for **TA332385**

HSP90AA1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:500 - 1:2000;IHC 1:50 - 1:100
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human HSP90AA1
Formulation:	Store at -20°C (regular) and -80°C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	90 kDa
Gene Name:	heat shock protein 90kDa alpha family class A member 1
Database Link:	NP_001017963 Entrez Gene 15519 MouseEntrez Gene 299331 RatEntrez Gene 3320 Human P07900



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Background:

HSP70 and HSP90 are molecular chaperones expressed constitutively under normal conditions to maintain protein homeostasis and are induced upon environmental stress (1). Both HSP70 and HSP90 are able to interact with unfolded proteins to prevent irreversible aggregation and catalyze the refolding of their substrates in an ATP- and co-chaperone-dependent manner (1). HSP70 has a broad range of substrates including newly synthesized and denatured proteins, while HSP90 tends to have a more limited subset of substrates, most of which are signaling molecules. HSP70 and HSP90 often function collaboratively in a multi-chaperone system, which requires a minimal set of co-chaperones: HSP40, Hop, and p23 (2,3). The co-chaperones either regulate the intrinsic ATPase activity of the chaperones or recruit chaperones to specific substrates or subcellular compartments (1,4). When the ubiquitin ligase CHIP associates with the HSP70/HSP90 complex as a cofactor, the unfolded substrates are subjected to degradation by the proteasome (4). The biological functions of HSP70/HSP90 extend beyond their chaperone activity. They are essential for the maturation and inactivation of nuclear hormones and other signaling molecules (1,3). They also play a role in vesicle formation and protein trafficking (2).

Synonyms:

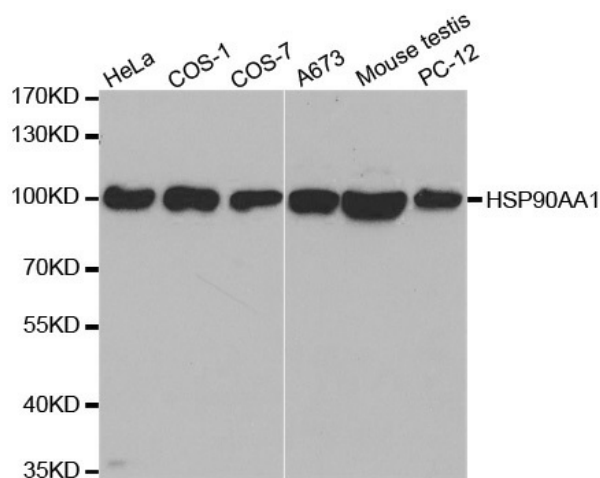
EL52; HSP86; Hsp89; HSP89A; Hsp90; HSP90A; HSP90N; HSPC1; HSPCA; HSPCAL1; HSPCAL4; HSPN; LAP-2; LAP2

Protein Families:

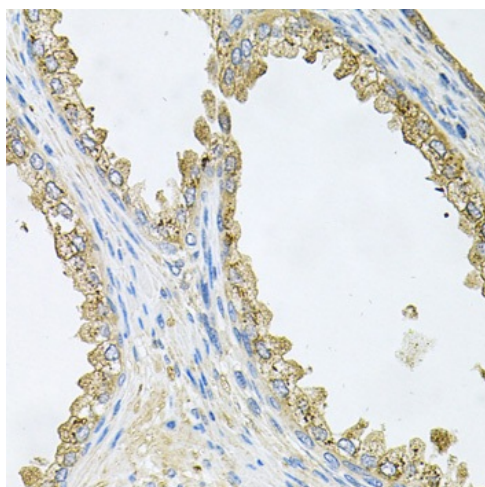
Druggable Genome

Protein Pathways:

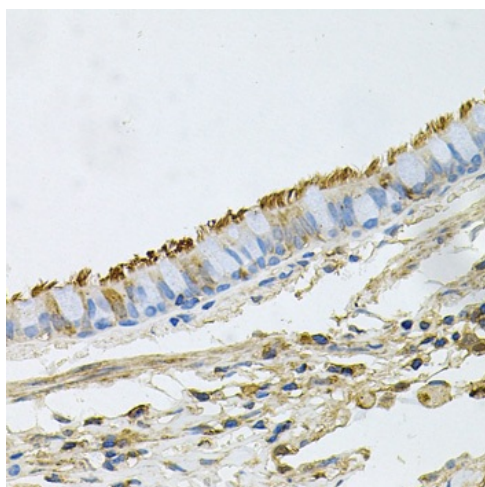
Antigen processing and presentation, NOD-like receptor signaling pathway, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer

Product images:

Western blot analysis of extracts of various cell lines, using HSP90AA1 antibody.



Immunohistochemistry of paraffin-embedded human prostate using HSP90AA1 antibody at dilution of 1:100 (x40 lens).



Immunohistochemistry of paraffin-embedded human lung using HSP90AA1 antibody at dilution of 1:100 (x40 lens).