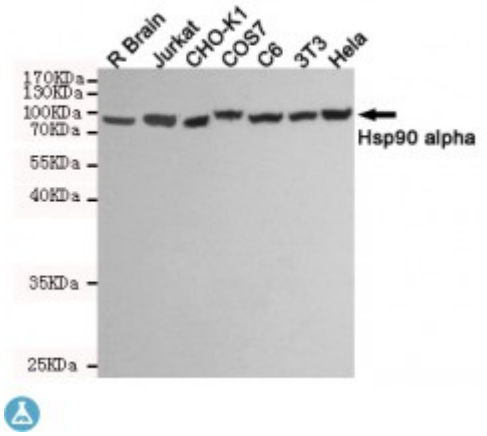
Anti-Hsp90 alpha antibody



Description	Mouse monoclonal to Hsp90 alpha.

Model	STJ99288
Host	Mouse
Reactivity	Human, Mouse, Rat, Simian
Applications	ELISA, WB
Immunogen	Purified recombinant human Hsp90 alpha protein fragments expressed in E.coli.
Gene ID	3320
Gene Symbol	HSP90AA1
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of Hsp90 alpha and does not cross-react with Hsp90 beta and other proteins.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	6H7-A3-2G6
Note	For Research Use Only (RUO).
Protein Name	Heat shock protein HSP 90-alpha Heat shock 86 kDa HSP 86 HSP86 Lipopolysaccharide-associated protein 2 LAP-2 LPS-associated protein 2 Renal carcinoma antigen NY-REN-38
Molecular Weight	90kDa

Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:5253OMIM:140571
Alternative Names	Heat shock protein HSP 90-alpha Heat shock 86 kDa HSP 86 HSP86 Lipopolysaccharide-associated protein 2 LAP-2 LPS-associated protein 2 Renal carcinoma antigen NY-REN-38
Function	Molecular chaperone that promotes the maturation, structural maintenance and proper regulation of specific target proteins involved for instance in cell cycle control and signal transduction. Undergoes a functional cycle that is linked to its ATPase activity which is essential for its chaperone activity. This cycle probably induces conformational changes in the client proteins, thereby causing their activation. Interacts dynamically with various co-chaperones that modulate its substrate recognition, ATPase cycle and chaperone function . Engages with a range of client protein classes via its interaction with various co-chaperone proteins or complexes, that act as adapters, simultaneously able to interact with the specific client and the central chaperone itself. Recruitment of ATP and co-chaperone followed by client protein forms a functional chaperone. After the completion of the chaperoning process, properly folded client protein and co-chaperone leave HSP90 in an ADP-bound partially open conformation and finally, ADP is released from HSP90 which acquires an open conformation for the next cycle . Apart from its chaperone activity, it also plays a role in the regulation of the transcription machinery. HSP90 and its co-chaperones modulate transcription at least at three different levels. In the first place, they alter the steady-state levels of certain transcription factors in response to various physiological cues. Second, they modulate the activity of certain epigenetic modifiers, such as histone deacetylases or DNA methyl transferases, and thereby respond to the change in the environment. Third, they participate in the eviction of histones from the promoter region of certain genes and thereby turn on gene expression . Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes . Antagonizes STUB1-mediated inhibition of TGF-beta signaling via inhibition of STUB1-mediated SMAD3 ubiquitination and degradation .
Sequence and Domain Family	The TPR repeat-binding motif mediates interaction with TPR repeat-containing proteins like the co-chaperone STUB1.
Cellular Localization	Cytoplasm Melanosome Cell membrane. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.
Post-translational Modifications	ISGylated. S-nitrosylated; negatively regulates the ATPase activity and the activation of eNOS by HSP90AA1.

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