10320 Camino Santa Fe, Suite G
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HSP90 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20649a

Specification

HSP90 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	P07900
Other Accession	P02828, P34058, P11499, Q4R4T5, P08238, Q04619, Q76LV1, P82995, P30946, O02705, P07901, Q4R4P1, P46633, P11501, Q76LV2, Q58FF6, Q58FF7, Q58FF8, Q90474, Q9GKX7, Q9GKX8, P30947, Q6AZV1
Reactivity	**Human, Mouse, Rat**
Predicted	**Zebrafish, Bovine, Chicken, Hamster, Horse, Monkey, Pig, Rabbit, Xenopus, Drosophila**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**84660**

HSP90 Antibody (N-term) - Additional Information

Gene ID 3320

Other 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, HSP90AA1, HSP90A, HSPC1, HSPCA

Target/Specificity
This HSP90 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 57-89 amino acids from the N-terminal region of human HSP90.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
HSP90 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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HSP90 Antibody (N-term) - Protein Information

Name HSP90AA1 (HGNC:5253)

Synonyms HSP90A, HSPC1, HSPCA

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 (PubMed:11274138, PubMed:12526792, PubMed:15577939, PubMed:15937123, PubMed:27353360, PubMed:29127155). 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 (PubMed:29127155). 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 (PubMed:26991466, PubMed:27295069). Plays a critical role in mitochondrial import, delivers preproteins to the mitochondrial import receptor TOMM70 (PubMed:12526792). 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 (PubMed:25973397). In the first place, they alter the steady-state levels of certain transcription factors in response to various physiological cues (PubMed:25973397). 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 (PubMed:25973397). Third, they participate in the eviction of histones from the promoter region of certain genes and thereby turn on gene expression (PubMed:25973397). Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:11276205). Antagonizes STUB1-mediated inhibition of TGF-beta signaling via inhibition of STUB1-mediated SMAD3 ubiquitination and degradation (PubMed:24613385). Mediates the association of TOMM70 with IRF3 or TBK1 in mitochondrial outer membrane which promotes host antiviral response (PubMed:20628368, PubMed:25609812).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P07901}. Cytoplasm {ECO:0000250|UniProtKB:P07901}. Melanosome. Cell membrane. Mitochondrion. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

HSP90 Antibody (N-term) - 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 Antibody (N-term) - Images

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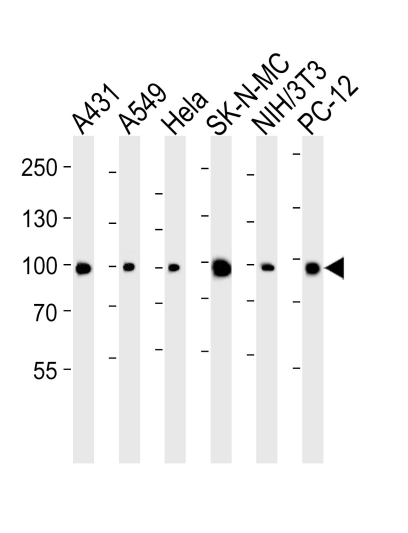

Western blot analysis of lysates from A431, A549, Hela, SK-N-MC, mouse NIH/3T3, rat PC-12 cell line (from left to right), using HSP90 Antibody (N-term)(Cat. #AP20649a). AP20649a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

HSP90 Antibody (N-term) - Background

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HSP90 Antibody (N-term) - References

Soeda E.,et al.Nucleic Acids Res. 17:7108-7108(1989).
Yamazaki M.,et al.Agric. Biol. Chem. 54:3163-3170(1990).
Hickey E.,et al.Mol. Cell. Biol. 9:2615-2626(1989).
Chen B.,et al.Genomics 86:627-637(2005).
Ota T.,et al.Nat. Genet. 36:40-45(2004).