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HSP90B1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4899A

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	P14625
Other Accession	Q66HD0, Q29092, P08113, Q4R520, P08110, Q95M18
Reactivity	Human, Hamster, Mouse
Predicted	Bovine, Chicken, Monkey, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25612
Calculated MW	92469
Antigen Region	16-43

Additional Information

Gene ID	7184
Other Names	Endoplasmin, 94 kDa glucose-regulated protein, GRP-94, Heat shock protein 90 kDa beta member 1, Tumor rejection antigen 1, gp96 homolog, HSP90B1, GRP94, TRA1
Target/Specificity	This HSP90B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-43 amino acids from the N-terminal region of human HSP90B1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 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	HSP90B1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HSP90B1 {ECO:0000303|PubMed:39509507, ECO:0000312|HGNC:HGNC:12028}

Function	ATP-dependent chaperone involved in the processing of proteins in the endoplasmic reticulum, regulating their transport (PubMed:23572575, PubMed:39509507). Together with MESD, acts as a modulator of the Wnt pathway by promoting the folding of LRP6, a coreceptor of the canonical Wnt pathway (PubMed:23572575, PubMed:39509507). When associated with CNPY3, required for proper folding of Toll-like receptors (PubMed:11584270). Promotes folding and trafficking of TLR4 to the cell surface (PubMed:11584270). May participate in the unfolding of cytosolic leaderless cargos (lacking the secretion signal sequence) such as the interleukin 1/IL-1 to facilitate their translocation into the ERGIC (endoplasmic reticulum- Golgi intermediate compartment) and secretion; the translocation process is mediated by the cargo receptor TMED10 (PubMed:32272059).
Cellular Location	Endoplasmic reticulum lumen. Sarcoplasmic reticulum lumen {ECO:0000250|UniProtKB:P41148}. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

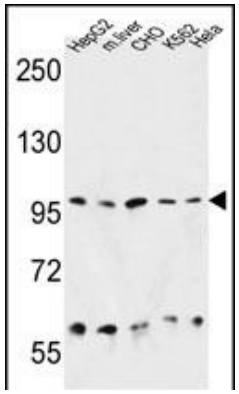
Background

HSP90B1 is highly conserved molecular chaperones that have key roles in signal transduction, protein folding, protein degradation, and morphologic evolution. HSP90 proteins normally associate with other cochaperones and play important roles in folding newly synthesized proteins or stabilizing and refolding denatured proteins after stress. HSP90B1 is an endoplasmic reticulum HSP90 protein. Other HSP90 proteins are found in cytosol.

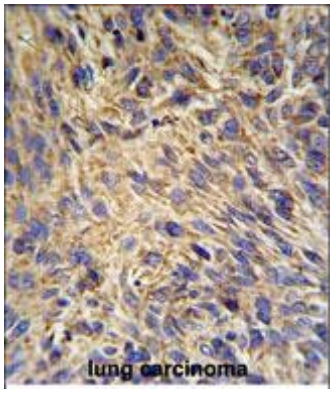
References

Koo, B.H., et al. J. Biol. Chem. 285(1):197-205(2010) Suriano, R., et al. Glycobiology 19(12):1427-1435(2009) Lev, A., et al. J. Immunol. 183(7):4205-4210(2009)

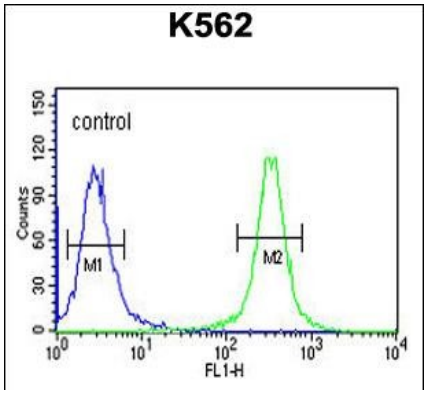
Images



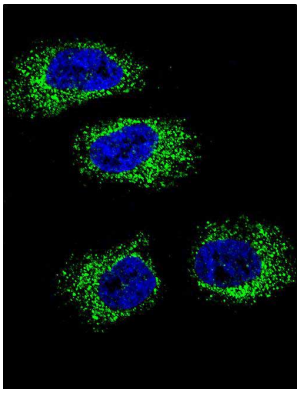
HSP90B1 Antibody (N-term) (Cat. #AP4899a) western blot analysis in HepG2, CHO, K562, Hela cell line and mouse liver tissue lysates (35ug/lane).This demonstrates the HSP90B1 antibody detected the HSP90B1 protein (arrow).



HSP90B1 Antibody (N-term) (Cat. #AP4899a) IHC analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the HSP90B1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



HSP90B1 Antibody (N-term) (Cat. #AP4899a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of HSP90B1 Antibody (N-term)(Cat#AP4899a) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

Citations

- The high-fat diet induces myocardial fibrosis in the metabolically healthy obese minipigs-The role of ER stress and oxidative stress.