

Hsp60 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5684

Product Information

Application	WB, IHC
Primary Accession	P10809
Other Accession	P31081 , Q5ZL72 , P18687 , Q39727 , P63038 , Q5NVM5 , P63039
Reactivity	Human, Mouse, Rat
Predicted	Human, Mouse, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61055
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	3329
Antigen Region	396-430
Other Names	60 kDa heat shock protein, mitochondrial, 60 kDa chaperonin, Chaperonin 60, CPN60, Heat shock protein 60, HSP-60, Hsp60, HuCHA60, Mitochondrial matrix protein P1, P60 lymphocyte protein, HSPD1, HSP60
Dilution	WB~~1:40000 IHC~~1:1000
Target/Specificity	This Hsp60 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 396-430 amino acids from human Hsp60.
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	Hsp60 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HSPD1
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Synonyms

HSP60

Function

Chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp10, facilitates the correct folding of imported proteins. May also prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated under stress conditions in the mitochondrial matrix (PubMed:[11422376](#), PubMed:[1346131](#)). The functional units of these chaperonins consist of heptameric rings of the large subunit Hsp60, which function as a back- to-back double ring. In a cyclic reaction, Hsp60 ring complexes bind one unfolded substrate protein per ring, followed by the binding of ATP and association with 2 heptameric rings of the co-chaperonin Hsp10. This leads to sequestration of the substrate protein in the inner cavity of Hsp60 where, for a certain period of time, it can fold undisturbed by other cell components. Synchronous hydrolysis of ATP in all Hsp60 subunits results in the dissociation of the chaperonin rings and the release of ADP and the folded substrate protein (Probable).

Cellular Location

Mitochondrion matrix.

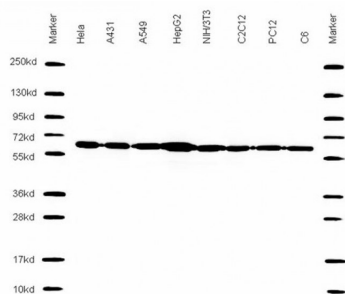
Background

Implicated in mitochondrial protein import and macromolecular assembly. May facilitate the correct folding of imported proteins. May also prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated under stress conditions in the mitochondrial matrix.

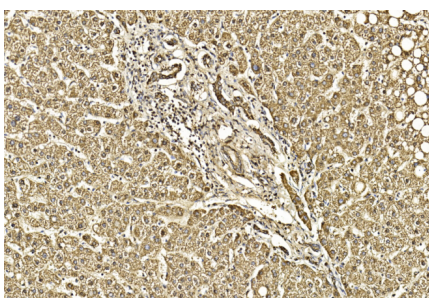
References

Jindal S.,et al.Mol. Cell. Biol. 9:2279-2283(1989).
Venner T.J.,et al.DNA Cell Biol. 9:545-552(1990).
Hansen J.J.,et al.Hum. Genet. 112:71-77(2003).
Tan J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



All lanes : Anti-Hsp60 Antibody at 1:40000 dilution Lane 1: HeLa whole cell lysate Lane 2: A431 whole cell lysate Lane 3: A549 whole cell lysate Lane 4: HepG2 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: C2C12 whole cell lysate Lane 7: PC-12 whole cell lysate Lane 8: C6 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human liver section using Pink1 (Cat#AW5684). AW5684 was diluted at 1:1000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.