

HSP60 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51271

Specification

HSP60 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Antigen Region WB <u>P10809</u> Human, Mouse, Rat Rabbit Polyclonal 60 KDa 511 - 570

HSP60 Antibody - Additional Information

Gene ID 3329

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

Target/Specificity KLH conjugated synthetic peptide derived from human HSP60

Dilution WB~~ 1;32000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

HSP60 Antibody - Protein Information

Name HSPD1

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



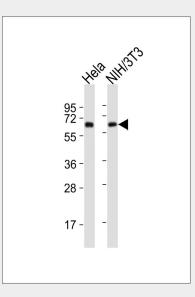
units of these chaperonins consist of heptameric rings of the large subunit Hsp60, which function as a back- to-back double ring. In a cyclic reaction, Hsp60 ring complexes bind one unfolded substrate protein per ring, followed by the binding of ATP and association with 2 heptameric rings of the co-chaperonin 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.

HSP60 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **HSP60 Antibody Images**



All lanes : Anti-HSP60 Antibody at 1:32000 dilution Lane 1: Hela whole cell lysates Lane 2: NIH/3T3 whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 61 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

HSP60 Antibody - 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.



HSP60 Antibody - 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).