

HSPD1 / HSP60 Antibody (aa350-400) Rabbit Polyclonal Antibody Catalog # ALS12082

Specification

HSPD1 / HSP60 Antibody (aa350-400) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC <u>P10809</u> Human, Monkey, Chicken, Bovine, Dog Rabbit Polyclonal 61kDa KDa

HSPD1 / HSP60 Antibody (aa350-400) - 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 A portion of amino acids 350-400 of human Hsp60 was used as the immunogen.

Reconstitution & Storage Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions HSPD1 / HSP60 Antibody (aa350-400) is for research use only and not for use in diagnostic or therapeutic procedures.

HSPD1 / HSP60 Antibody (aa350-400) - 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:1346131, PubMed:11422376). 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).

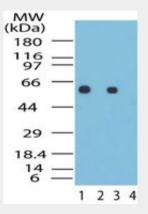
Cellular Location Mitochondrion matrix.

HSPD1 / HSP60 Antibody (aa350-400) - Protocols

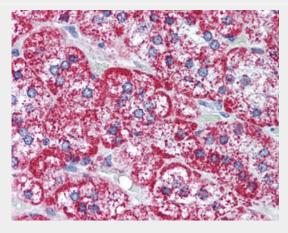
Provided below are standard protocols that you may find useful for product applications.

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

HSPD1 / HSP60 Antibody (aa350-400) - Images



Western blot of Hsp60 in the 1) absence and 2) presence of immunizing peptide in HeLa cell...



Anti-HSPD1 antibody IHC of human adrenal. HSPD1 / HSP60 Antibody (aa350-400) - 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.

HSPD1 / HSP60 Antibody (aa350-400) - 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).