

HSPD1 / HSP60 Antibody

Goat Polyclonal Antibody Catalog # ALS12900

Specification

HSPD1 / HSP60 Antibody - Product Information

WB, IHC Application **Primary Accession** P10809

Reactivity Human, Mouse, Rat, Rabbit, Hamster,

Monkey, Pig, Sheep, Xenopus, Bovine,

Guinea Pig, Fish, Dog, Bacteria, Drosophila

Host Goat Clonality **Polyclonal** Calculated MW 61kDa KDa

HSPD1 / 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

Hsp60

Reconstitution & Storage

Store at -20°C.

Precautions

HSPD1 / HSP60 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HSPD1 / HSP60 Antibody - Protein Information

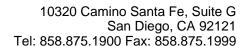
Name HSPD1

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:<a

 $href="http://www.uniprot.org/citations/1346131" \ target="_blank">1346131, PubMed:11422376). The$ 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 LocationMitochondrion matrix.

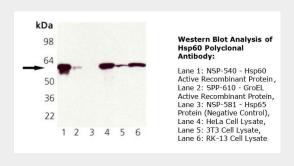
Volume 50 µl

HSPD1 / HSP60 Antibody - Protocols

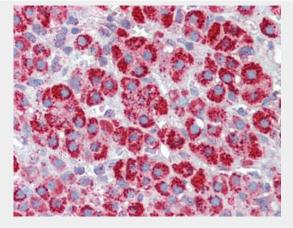
Provided below are standard protocols that you may find useful for product applications.

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

HSPD1 / HSP60 Antibody - Images

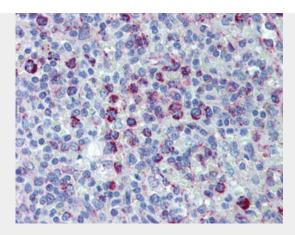


0

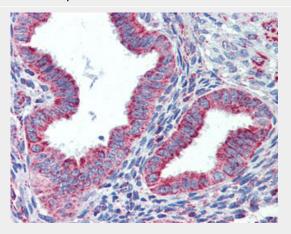


Anti-HSPD1 antibody IHC of human adrenal.





Anti-HSPD1 antibody IHC of human spleen.



Anti-HSPD1 antibody IHC of human uterus.

HSPD1 / 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.

HSPD1 / 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).