

HSPD1 / HSP60 Antibody (aa1-573, clone 2E4)
Mouse Monoclonal Antibody
Catalog # ALS12562

Specification

HSPD1 / HSP60 Antibody (aa1-573, clone 2E4) - Product Information

Application	IHC, WB
Primary Accession	P10809
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	61kDa KDa

HSPD1 / HSP60 Antibody (aa1-573, clone 2E4) - 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

Reconstitution & Storage

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

HSPD1 / HSP60 Antibody (aa1-573, clone 2E4) is for research use only and not for use in diagnostic or therapeutic procedures.

HSPD1 / HSP60 Antibody (aa1-573, clone 2E4) - 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

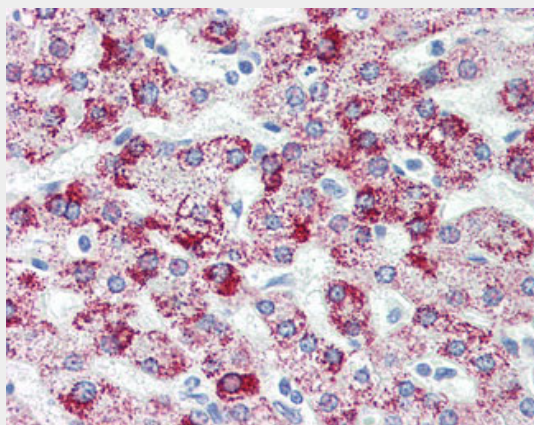
Mitochondrion matrix.

HSPD1 / HSP60 Antibody (aa1-573, clone 2E4) - Protocols

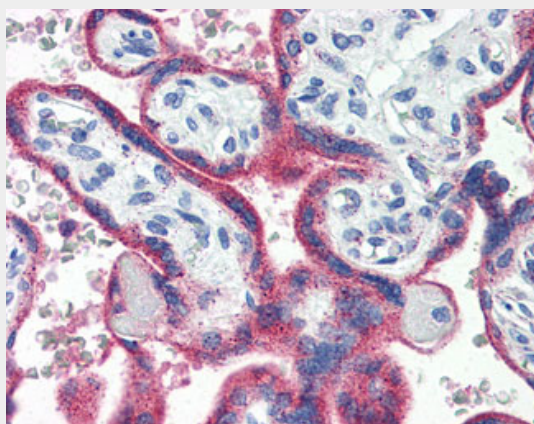
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

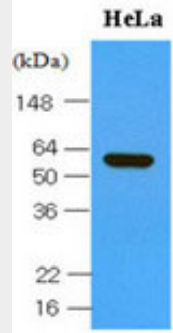
HSPD1 / HSP60 Antibody (aa1-573, clone 2E4) - Images



Anti-HSPD1 antibody IHC of human liver.



Anti-HSPD1 antibody IHC of human placenta.



Cell lysates of HeLa (30 ug) were resolved by SDS-PAGE, transferred to NC membrane and probed...

HSPD1 / HSP60 Antibody (aa1-573, clone 2E4) - 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 (aa1-573, clone 2E4) - 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).