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Hsp60 Blocking Peptide

Synthetic peptide
Catalog # BP22126a

Specification

Hsp60 Blocking Peptide - Product Information

Primary Accession	P10809
Other Accession	P31081, Q5ZL72, P18687, Q39727, P63038, Q5NVM5, P63039

Hsp60 Blocking Peptide - 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
The synthetic peptide sequence is selected from aa 416-430 of HUMAN HSPD1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Hsp60 Blocking Peptide - Protein Information

Name HSPD1

Synonyms HSP60

Hsp60 Blocking Peptide - 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 Blocking Peptide - 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).

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.

Hsp60 Blocking Peptide - Protocols

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

- Blocking Peptides