

**HSP10 Polyclonal Antibody**  
**Catalog # AP70431****Specification**

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**HSP10 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IF
Primary Accession	<a href="#">P61604</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**HSP10 Polyclonal Antibody - Additional Information****Gene ID** 3336**Other Names**

HSP10; 10 kDa heat shock protein; mitochondrial; Hsp10; 10 kDa chaperonin; Chaperonin 10; CPN10; Early-pregnancy factor; EPF

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.

IHC-P~~N/A

IF~~1:50~200

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**HSP10 Polyclonal Antibody - Protein Information****Name** HSP10**Function**

Co-chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp60, 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/11422376" target="\_blank">11422376</a>, PubMed:<a href="http://www.uniprot.org/citations/1346131" target="\_blank">1346131</a>, PubMed:<a href="http://www.uniprot.org/citations/7912672" target="\_blank">7912672</a>). 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).

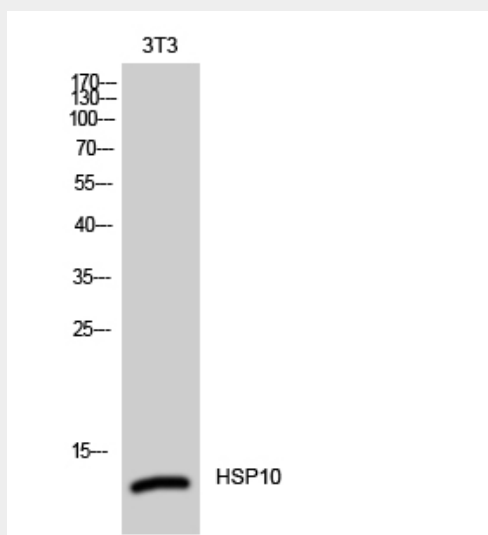
**Cellular Location**

Mitochondrion matrix.

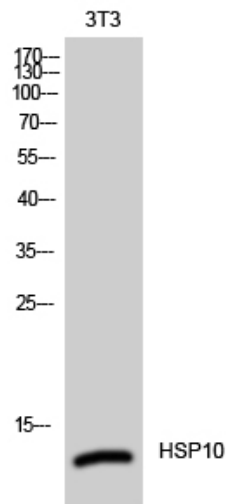
**HSP10 Polyclonal Antibody - Protocols**

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](#)

**HSP10 Polyclonal Antibody - Images**

Western Blot analysis of 3T3 cells using HSP10 Polyclonal Antibody



Western Blot analysis of 3T3 cells using HSP10 Polyclonal Antibody

#### **HSP10 Polyclonal Antibody - Background**

Co-chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp60, 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:7912672, 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).