

**HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide  
Mouse Monoclonal Antibody [Clone SPM253 ]  
Catalog # AH10487**

**Specification**

**HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide -  
Product Information**

Application	,1,14,3,4,
Primary Accession	<a href="#">P10809</a>
Other Accession	<a href="#">3329</a> , <a href="#">595053</a>
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Bovine, Sheep, Xenopus, Dog, Drosophila
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	60kDa KDa

**HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide -  
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

**Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA at 1.0mg/ml.

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide -  
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/11422376" target="\_blank">11422376</a>, PubMed:<a href="http://www.uniprot.org/citations/1346131" target="\_blank">1346131</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

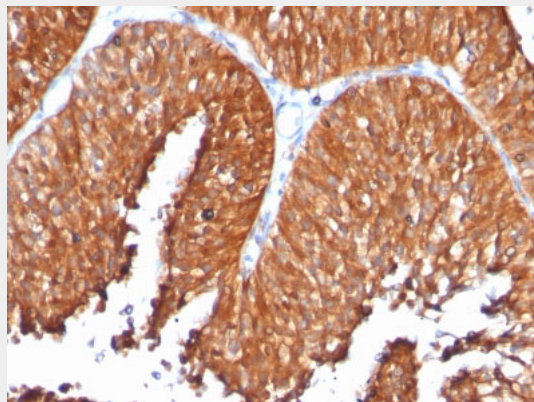
Mitochondrion matrix.

#### HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide - Protocols

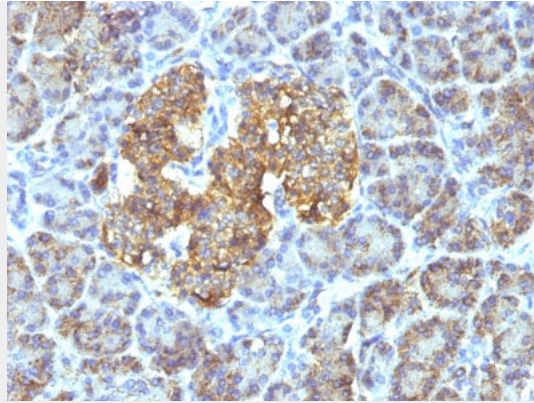
Provided below are standard protocols that you may find useful for product applications.

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

#### HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with HSP60 Monoclonal Antibody (SPM253)



Formalin-fixed, paraffin-embedded human Pancreas stained with HSP60 Monoclonal Antibody (SPM253).

### **HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide - Background**

Recognizes a 60kDa protein, identified as the heat shock protein 60 (hsp60). Its epitope is localized between aa 383-447 of human hsp60. A wide variety of environmental and pathophysiological stressful conditions trigger the synthesis of a family of proteins known as heat shock proteins (hsp's), more appropriately called as stress response proteins (srp's). hsp60 is a potential antigen in a number of autoimmune diseases. In human arthritis and in experimentally induced arthritis in animals, disease development coincides with the development of immune reactivity directed against not only bacterial hsp60, but also against its mammalian homolog.

### **HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide - References**

Boog CJ; de Graeff-Meeder ER; Lucassen MA; van der Zee R; Voorhorst-Ogink MM; van Kooten PJ; Geuze HJ; van Eden W. Two monoclonal antibodies generated against human hsp60 show reactivity with synovial membranes of patients with juvenile chronic arthritis. *Journal of Experimental Medicine*, 1992, 175(6):1805-10