

HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone HSPD1/780]
Catalog # AH11466

Specification

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

Application	,1,2,3,4,
Primary Accession	P10809
Other Accession	3329 , 595053
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Cow, Sheep, Dog
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

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: [1346131](http://www.uniprot.org/citations/1346131), PubMed: [11422376](http://www.uniprot.org/citations/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

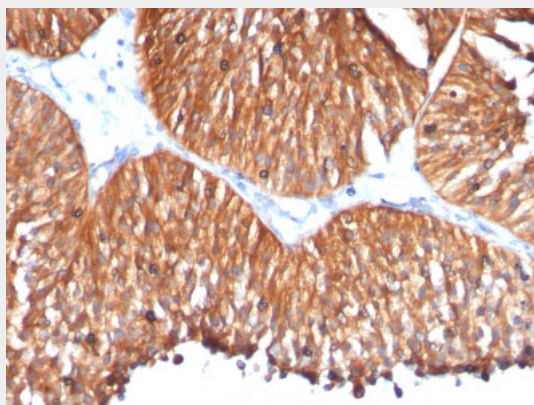
Mitochondrion matrix.

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

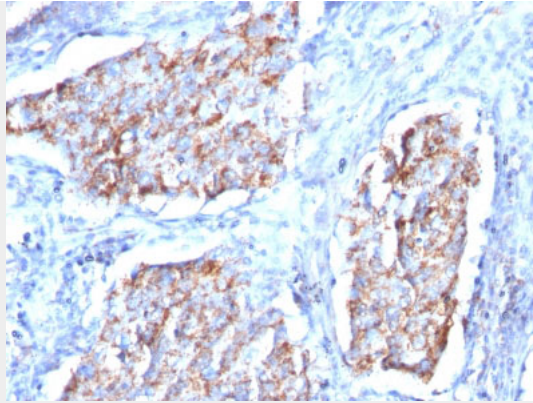
Provided below are standard protocols that you may find useful for product applications.

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

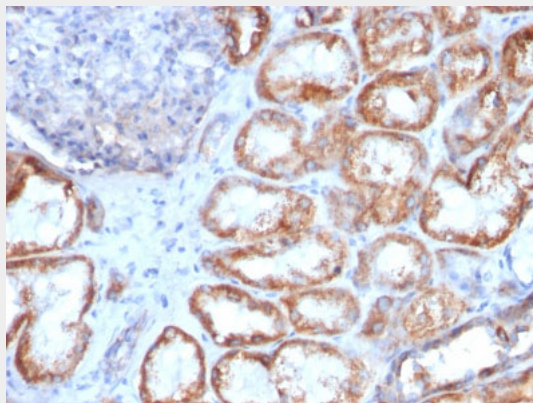
HSP60 (Heat Shock Protein 60) (Mitochondrial Marker) Antibody - With BSA and Azide - Images



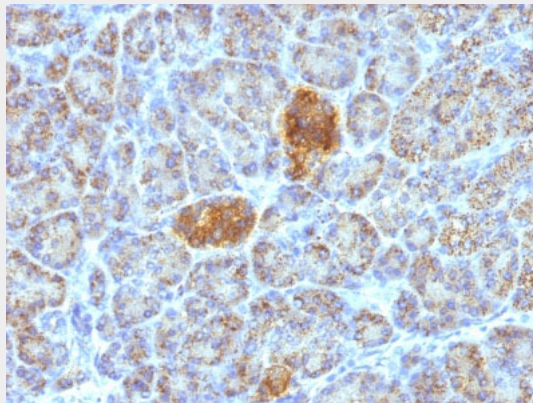
Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with HSP60 Monoclonal Antibody (HSPD1/780)



Formalin-fixed, paraffin-embedded human Lung Carcinoma stained with HSP60 Monoclonal Antibody (HSPD1/780)



Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with HSP60 Monoclonal Antibody (HSPD1/780)



Formalin-fixed, paraffin-embedded human Pancreas stained with HSP60 Monoclonal Antibody (HSPD1/780).

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). 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**

Schlesinger, M.J., et al. 1982. Heat Shock: from Bacteria to Man. Cold Spring Harbor, N.Y.: Cold Spring Harbor Laboratory