

**Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone SPM389 ]**  
**Catalog # AH12096**

**Specification**

**Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - Product Information**

Application	WB, IHC, IF, FC
Primary Accession	<a href="#">P99999</a>
Other Accession	<a href="#">54205</a> , <a href="#">437060</a>
Reactivity	Human, Mouse, Rat, Horse, Dog
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Calculated MW	15kDa KDa

**Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - Additional Information**

**Gene ID** 54205

**Other Names**

Cytochrome c, CYCS, CYC

**Application Note**

WB~~1:1000  
IHC~~1:100~500  
IF~~1:50~200  
FC~~1:10~50

**Storage**

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

**Precautions**

Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - Protein Information**

**Name** CYCS

**Synonyms** CYC

**Function**

Electron carrier protein. The oxidized form of the cytochrome c heme group can accept an electron from the heme group of the cytochrome c1 subunit of cytochrome reductase. Cytochrome c then transfers this electron to the cytochrome oxidase complex, the final protein carrier in the mitochondrial electron-transport chain.

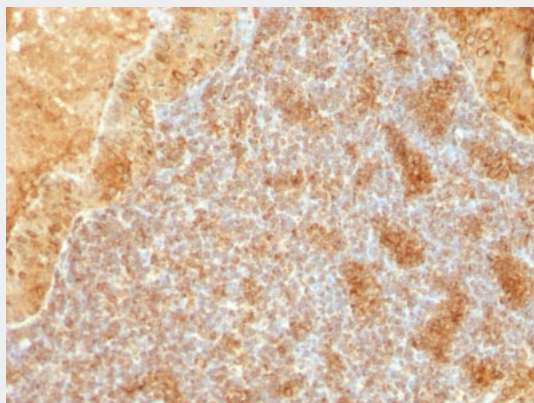
**Cellular Location**

Mitochondrion intermembrane space. Note=Loosely associated with the inner membrane

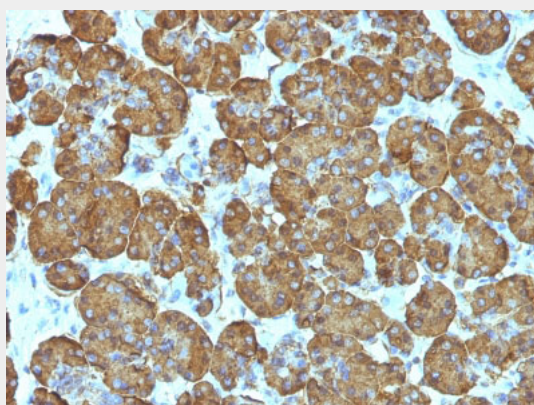
**Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - Protocols**

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](#)

**Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - Images**

Formalin-fixed, paraffin-embedded human Salivary Tumor stained with Cytochrome C Monoclonal Antibody (SPM389).



Formalin-fixed, paraffin-embedded human Pancreas stained with Cytochrome C Monoclonal Antibody (SPM389).

**Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - Background**

It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In

mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This MAb recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e cytochrome in the mitochondria with heme attached).

#### **Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - References**

Goshorn SG, E Retzel, and R Jemmerson. Common Structural Features among Monoclonal Antibodies Binding the Same Antigenic Region of Cytochrome c. J Biol Chem 266:2134-2142 (1991).

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