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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	**,1,2,3,4,**
Primary Accession	P99999
Other Accession	54205, 437060
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

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

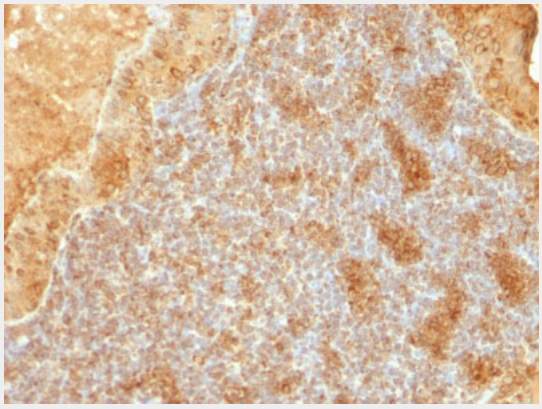
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Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide - Protocols

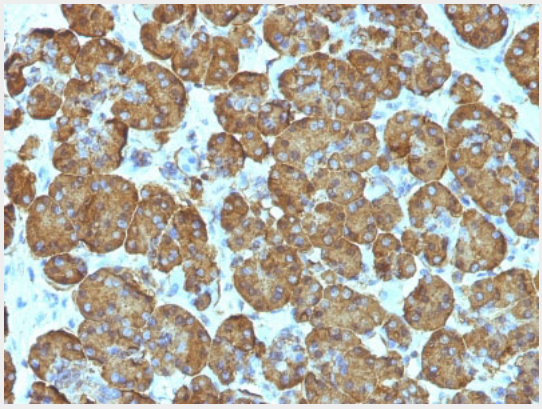
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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).