

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

Mouse Monoclonal Antibody [Clone CTC05]
Catalog # AH12099

Specification

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

Application WB, IHC, IF, FC

Primary Accession P99999

Other Accession <u>54205</u>, <u>437060</u>

Reactivity
Host
Clonality
Human, Mouse, Rat, Horse, Dog
Mouse
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<br \> <span class
="dilution_IHC">IHC~~1:100~500 <br \> <span class
="dilution_IF">IF~~1:50~200 <br \> 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

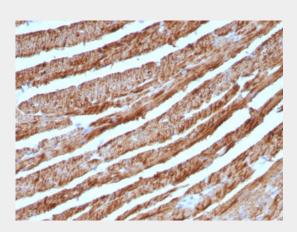
Mitochondrion intermembrane space. Note=Loosely associated with the inner membrane

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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



Formalin-fixed, paraffin-embedded Human Heart stained with Cytochrome C Monoclonal Antibody (CTC05).

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

Cytochrome C is 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.

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).