

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

Mouse Monoclonal Antibody [Clone CTC05 ]

Catalog # AH12099

## Product Information

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<b>Application</b>	WB, IHC, IF, FC
<b>Primary Accession</b>	<a href="#">P99999</a>
<b>Other Accession</b>	<a href="#">54205</a> , <a href="#">437060</a>
<b>Reactivity</b>	Human, Mouse, Rat, Horse, Dog
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse / IgG2b, kappa
<b>Clone Names</b>	CTC05
<b>Calculated MW</b>	11749

## Additional Information

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<b>Gene ID</b>	54205
<b>Other Names</b>	Cytochrome c, CYCS, CYC
<b>Application Note</b>	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
<b>Storage</b>	Store at 2 to 8°C.Antibody is stable for 24 months.
<b>Precautions</b>	Cytochrome C (Mitochondrial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CYCS
<b>Synonyms</b>	CYC
<b>Function</b>	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.
<b>Cellular Location</b>	Mitochondrion intermembrane space. Note=Loosely associated with the inner membrane

## Background

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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.

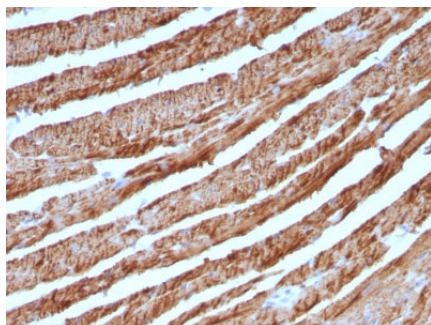
## References

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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). |

## Images

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.