

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

Mouse Monoclonal Antibody [Clone 6H2.B4] Catalog # AH12090

Product Information

Application IF, FC Primary Accession P99999

Other Accession 54205, 437060
Reactivity Human, Mouse, Rat

Host Mouse **Clonality** Monoclonal

Isotype Mouse / IgG1, kappa

Clone Names 6H2.B4 Calculated MW 11749

Additional Information

Gene ID 54205

Other Names Cytochrome c, CYCS, CYC

Application Note 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.

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

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.

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)

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