

## Cytochrome C (Mitochondrial Marker) Antibody

Mouse Monoclonal Antibody [Clone 7H8.2C12]

Catalog No	Format	Size
54205-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
54205-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
54205-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

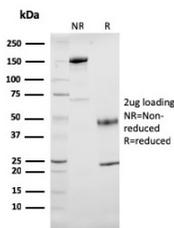
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

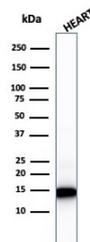
<b>Clone</b>	7H8.2C12
<b>Gene Name</b>	CYCS
<b>Immunogen</b>	Synthetic peptides corresponding to amino acid 1-80, 81-104 and 66-104 of pigeon cytochrome c
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b / Kappa
<b>Mol. Weight of Antigen</b>	15kDa
<b>Cellular Localization</b>	Mitochondrion intermembrane space
<b>Species Reactivity</b>	Dog, Drosophila, Frog, Horse, Human, Mouse, Pigeon, Rat
<b>Positive Control</b>	HeLa, HL-60, Jurkat, K-562, NIH3T3 or PC-3 cells. Liver or Cardiac muscle.

\*Optimal dilution for a specific application should be determined.

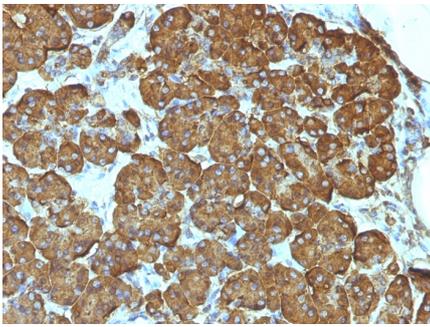
### Product Images for Cytochrome C (Mitochondrial Marker) Antibody



SDS-PAGE Analysis of Purified Cytochrome C Mouse Monoclonal Antibody (7H8.2C12). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of Heart tissue lysate using Cytochrome C Mouse Monoclonal Antibody (7H8.2C12).



Formalin-fixed, paraffin-embedded human Pancreas stained with Cytochrome C Mouse Monoclonal Antibody (7H8.2C12).

### Specificity & Comments

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).

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Apoptosis, Autophagy, Cardiovascular, Complement System, Lung Cancer, Mitochondria Marker, Transcription Factors