

## Basic Information

<b>Product Name</b>	Anti-Cytochrome c/CYCS Antibody (Clone#15F10)	
<b>Gene Name</b>	CYCS	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG1	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Cytochrome C recombinant protein (Position: G2-E105). Human Cytochrome C shares 91% amino acid (aa) sequence identity with both mouse and rat Cytochrome C.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	protein G purified.	
<b>Observed MW</b>	14 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

CYCS is also known as CYC, HCS or THC4. This gene encodes a small heme protein that functions as a central component of the electron transport chain in mitochondria. The encoded protein associates with the inner membrane of the mitochondrion where it accepts electrons from cytochrome b and transfers them to the cytochrome oxidase complex. This protein is also involved in initiation of apoptosis. Mutations in this gene are associated with autosomal dominant nonsyndromic thrombocytopenia. Numerous processed pseudogenes of this gene are found throughout the human genome.

## Reference

Anti-Cytochrome c/CYCS Antibody (Clone#15F10)被引用在10文献中。

## Selected Validation Data

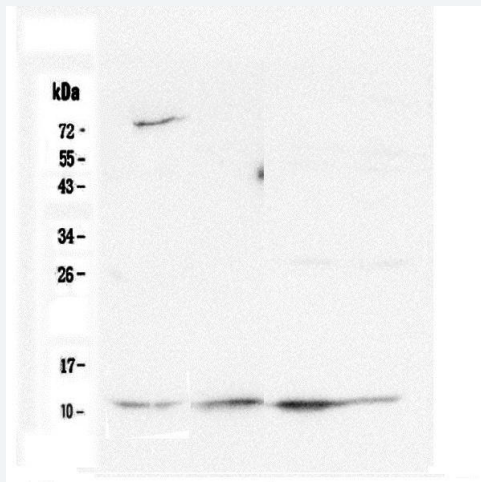


Figure 1. Western blot analysis of anti-Cytochrome c/CYCS antibody (M03529-5). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human K562 whole cell lysates,

Lane 4: human Caco-2 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Cytochrome c/CYCS antigen affinity purified monoclonal antibody (M03529-5) and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cytochrome c/CYCS at approximately 14 kDa. The expected band size for Cytochrome c/CYCS is at 12 kDa.

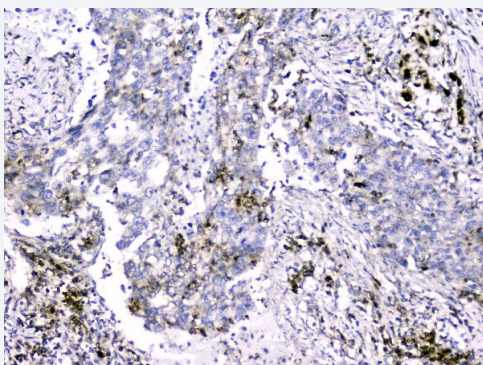


Figure 3. IHC analysis of Cytochrome c/CYCS using anti-Cytochrome c/CYCS antibody (M03529-5).

Cytochrome c/CYCS was detected in a paraffin-embedded section of human lung cancer tissue. The tissue section was incubated with mouse anti-Cytochrome c/CYCS Antibody (M03529-5) at a dilution of 1:200 and developed using HRP Conjugated mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB (Catalog # AR1022) as the chromogen.

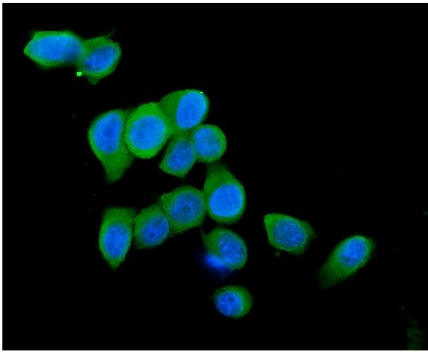


Figure 6. IF analysis of Cytochrome c/CYCS using anti-Cytochrome c/CYCS antibody (M03529-5).

Cytochrome c/CYCS was detected in an immunocytochemical section of MCF-7 cells. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

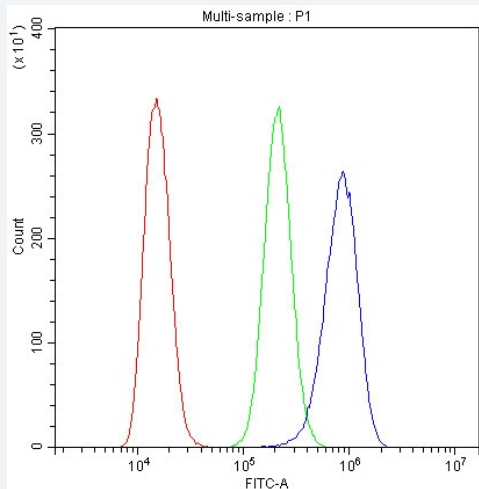


Figure 7. Flow Cytometry analysis of A431 cells using anti-Cytochrome c/CYCS antibody (M03529-5).

Overlay histogram showing A431 cells stained with M03529-5 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Cytochrome c/CYCS Antibody (M03529-5) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.