

Basic Information

Product Name	Anti-Cytochrome c/CYCS Antibody	
Gene Name	CYCS	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF, ICC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	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.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	14KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry: 1:50-400 Immunofluorescence (IF): 1:50-400 (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.

Selected Validation Data

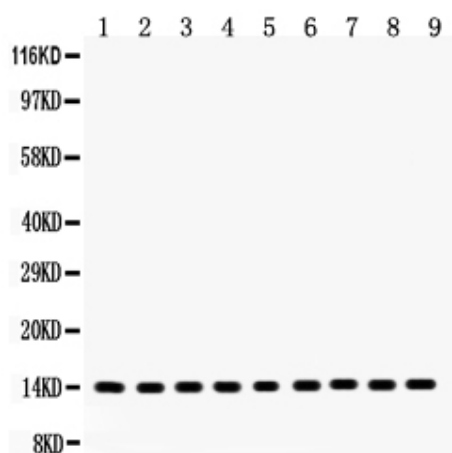


Figure 1. Western blot analysis of Cytochrome C using anti-Cytochrome C antibody (PB9334). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat Brain Tissue Lysate, Lane 2: Mouse Brain Tissue Lysate, Lane 3: Rat Cardiac Muscle Tissue Lysate, Lane 4: Mouse Cardiac Muscle Tissue Lysate, Lane 5: U87 Whole Cell Lysate, Lane 6: NEURO Whole Cell Lysate, Lane 7: HELA Whole Cell Lysate, Lane 8: JURKAT Whole Cell Lysate, Lane 9: Human Placenta Tissue Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Cytochrome C antigen affinity purified polyclonal antibody (Catalog # PB9334) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Cytochrome C at approximately 14KD. The expected band size for Cytochrome C is at 14KD.

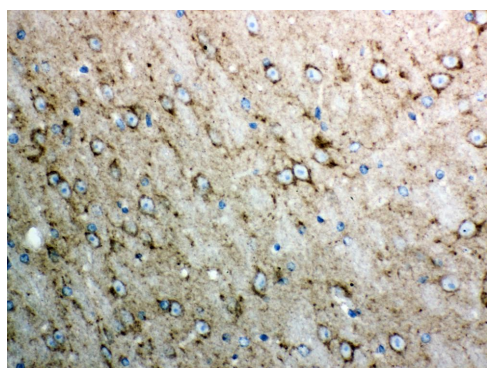


Figure 2. IHC analysis of Cytochrome C using anti-Cytochrome C antibody (PB9334). Cytochrome C was detected in paraffin-embedded section of Mouse Brain Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Cytochrome C Antibody (PB9334) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

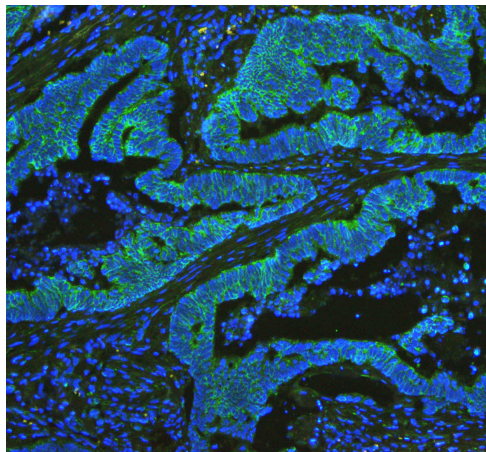


Figure 6. IF analysis of Cytochrome C using anti- Cytochrome C antibody (PB9334)

Cytochrome C was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/mL rabbit anti- Cytochrome C Antibody (PB9334) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.