

## Anti-Cytochrome C/CYCS Antibody

Catalog Number: PA1118

### About CYCS

Cytochrome C is located in the mitochondria of all aerobic cells and is involved in the electron transport system. Human cytochrome c has 104 amino acid residues and a molecular weight of 11,458 and is mapped to 7p15.2. Cytochrome c released from mitochondria has been proposed to be an essential component of an apoptotic pathway responsive to DNA damage and other forms of cell stress. And it has a role in different apoptotic signaling cascades.

### Overview

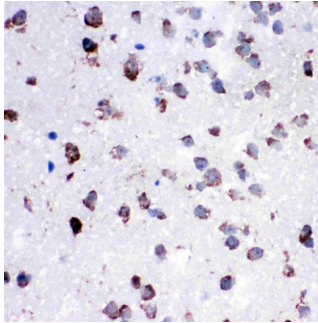
Product Name	Anti-Cytochrome C/CYCS Antibody
Reactive Species	Human, Monkey, Mouse, Rat
Description	Boster Bio Anti-Cytochrome C/CYCS Antibody catalog # PA1118. Tested in Flow Cytometry, IF, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Monkey, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg NaN <sub>3</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P99999

### Technical Details

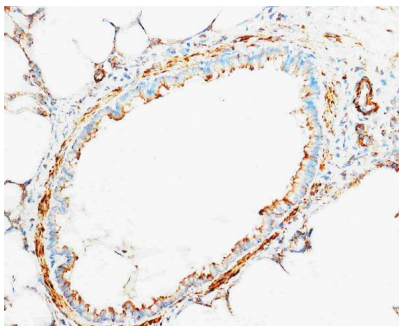
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Cytochrome C, identical to the related mouse and rat sequences.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat, Monkey</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, Mouse, By Heat</p> <p>Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Human, Rat, Mouse</p> <p>Immunocytochemistry , 0.5-1ug/ml, Human, -</p> <p>Immunocytochemistry/Immunofluorescence, 5ug/ml, Human</p> <p>Flow Cytometry, 1-ug/1x10<sup>6</sup> cells, Human</p>

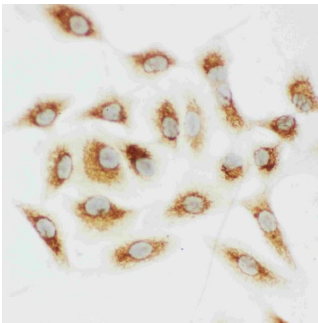
## Anti-Cytochrome C/CYCS Antibody (PA1118) Images



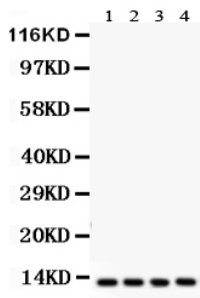
Anti-Cytochrome C antibody, PA1118, IHC(P)  
IHC(P): Rat Lung Tissue



Anti-Cytochrome C antibody, PA1118, IHC(F)  
IHC(F): Rat Brain Tissue

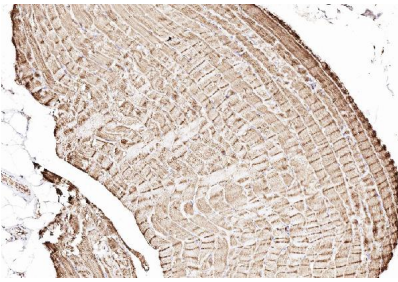


Anti-Cytochrome C antibody, PA1118, ICC  
ICC: A549 Cell



Anti-Cytochrome C antibody, PA1118, Western blotting  
All lanes: Anti Cytochrome C (PA1118) at 0.5ug/ml  
Lane 1: Rat Liver Tissue Lysate at 50ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: MCF-7 Whole Cell Lysate at 40ug  
Lane 4: HEPA Whole Cell Lysate at 40ug  
Predicted bind size: 12KD  
Observed bind size: 12KD

Figure 5. IHC analysis of Cytochrome C using anti-Cytochrome C antibody (PA1118).  
Cytochrome C was detected in paraffin-embedded section of human skeletal muscle 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 1ug/ml rabbit anti-Cytochrome C Antibody (PA1118) 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.

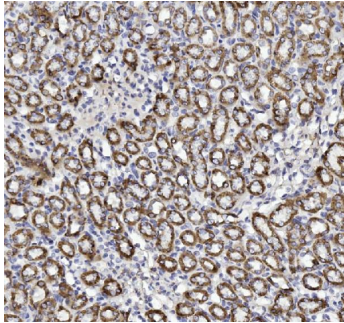


Figure 6. IHC analysis of Cytochrome C using anti-Cytochrome C antibody (PA1118).

Cytochrome C was detected in paraffin-embedded section of rat kidney 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 1ug/ml rabbit anti-Cytochrome C Antibody (PA1118) 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.

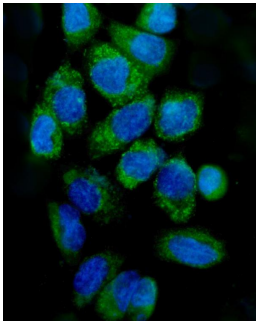


Figure 7. IF analysis of CYCS using anti-CYCS antibody (PA1118).

CYCS was detected in immunocytochemical section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-CYCS Antibody (PA1118) overnight at 4°C. DyLight®488 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.

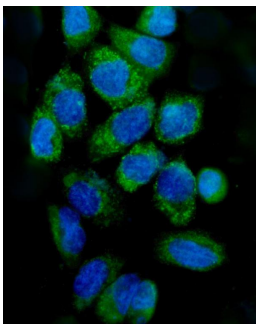
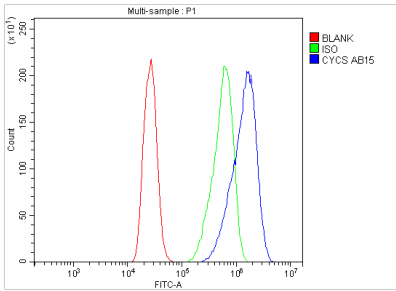


Figure 8. IF analysis of CYCS using anti-CYCS antibody (PA1118).

CYCS was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-CYCS Antibody (PA1118) overnight at 4°C. DyLight®488 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.

Figure 9. Flow Cytometry analysis of CACO-2 cells using anti-CYCS antibody (PA1118).

Overlay histogram showing CACO-2 cells stained with PA1118 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CYCS Antibody (PA1118, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C.



DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

## 20 Publications Citing This Product

1. PubMed ID: 10.1016/j.jid.2018.05.028, A Hexokinase 2 Modulator for Field-Directed Treatment of Experimental Actinic Keratoses
2. PubMed ID: 32733634, Zhang T, Chen Y, Cai J, Pan M, Sun Q, Zhang J, Sun C. SOCS2 Inhibits Mitochondrial Fatty Acid Oxidation via Suppressing LepR/JAK2/AMPK Signaling Pathway in Mouse Adipocytes. Oxid Med Cell Longev. 2020 Jul 13;2020:3742542. doi:10.1155/2020/3742542. PMID:32733634; PMCID: PMC7342542
3. PubMed ID: 25344274, Huang C, Lin Y, Su H, Ye D. Neurochem Res. 2015 Jan;40(1):27-35. Doi: 10.1007/S11064-014-1461-5. Epub 2014 Oct 25. Forsythiaside Protects Against Hydrogen Peroxide-Induced Oxidative Stress And Apoptosis In Pc12 Cell.

Visit [bosterbio.com/anti-cytochrome-c-antibody-pa1118-boster.html](http://bosterbio.com/anti-cytochrome-c-antibody-pa1118-boster.html) to see all 20 publications.

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