BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-Cytochrome C/Cycs Antibody Picoband®

Catalog Number: A03529

About Cycs

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.

Overview

Product Name	Anti-Cytochrome C/Cycs Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Cytochrome C/Cycs Antibody Picoband® catalog # A03529. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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	P62897

Technical Details

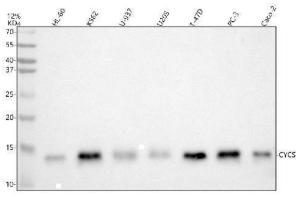
Immunogen	E. coli-derived mouse Cytochrome C recombinant protein (Position: G2-E105). Mouse Cytochrome C shares 91.3% and 100% amino acid (aa) sequence identity with human and rat Cytochrome C, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

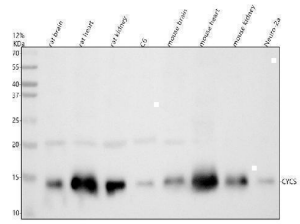
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-Cytochrome C/Cycs Antibody Picoband® (A03529) Images



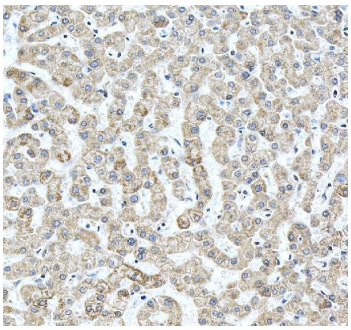
Western blot analysis of Cytochrome C using anti-Cytochrome C antibody (A03529). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HL-60 whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human U-937 whole cell lysates, Lane 4: human U20S whole cell lysates, Lane 5: human T-47D whole cell lysates, Lane 6: human PC-3 whole cell lysates, Lane 7: human CACO-2 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 # A03529) at 0.5 ug/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 1:5000 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 14 kDa. The expected band size for Cytochrome C is at 12 kDa.



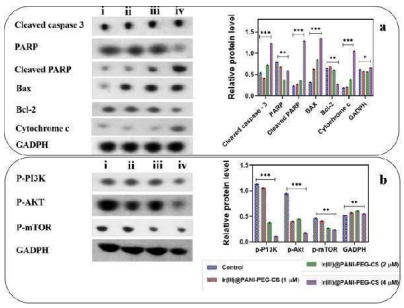
Western blot analysis of Cytochrome C using anti-Cytochrome C antibody (A03529). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat heart tissue lysates, Lane 3: rat kidney tissue lysates, Lane 4: rat C6 whole cell lysates, Lane 5: mouse brain tissue lysates, Lane 6: mouse heart tissue lysates, Lane 7: mouse kidney tissue lysates, Lane 8: mouse Neuro-2a whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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 # A03529) at 0.5 ug/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 1:5000 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 14 kDa. The expected band size for Cytochrome C is at 12 kDa.

IHC analysis of Cytochrome c/CYCS using anti-Cytochrome c/CYCS antibody (A03529). Cytochrome c/CYCS was detected in a paraffin-embedded section of human liver tissue. Heat mediated antigen retrieval was performed in

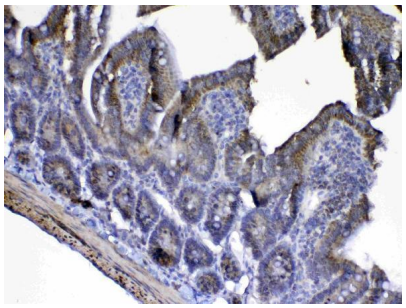
BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com



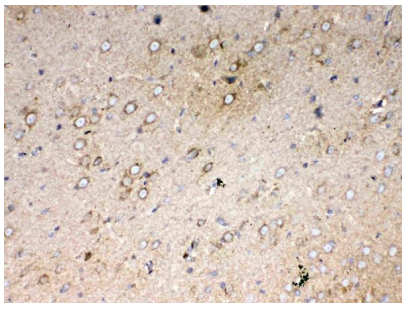
EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Cytochrome c/CYCS Antibody (A03529) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



a Western blotting was used to examine mitochondrial apoptotic pathway-related proteins after treatment with control (i), PANI-PEG-CS (ii), Ir(III) complex (iii), and Ir(III)@PANI-PEG-CS (iv). Key proteins involved in apoptosis such as Bax, Bcl-2, cytochrome c, and cleaved caspase-3 were examined to better understand how each treatment affects cell death at the mitochondrial level. b To further investigate the underlying molecular mechanisms, western blotting was used to investigate the PI3K/AKT/mTOR pathway (i), PANI-PEG-CS (ii), Ir(III) complex (iii), and Ir(III)@PANI-PEG-CS (iv). Expression levels of PI3K, AKT (total and phosphorylated), and mTOR were evaluated to assess whether this survival pathway was activated or suppressed. Protein levels were quantified and compared to the control group to determine statistical significance. * p



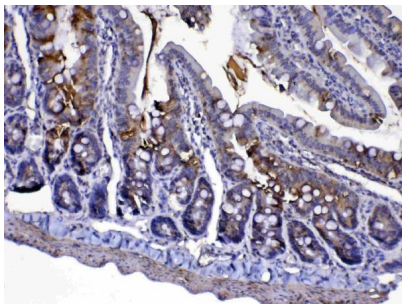
IHC analysis of Cytochrome C using anti-Cytochrome C antibody (A03529). Cytochrome C was detected in paraffin-embedded section of mouse intestine tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Cytochrome C Antibody (A03529) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



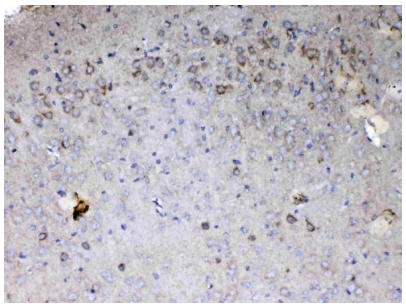
IHC analysis of Cytochrome C using anti-Cytochrome C antibody (A03529). Cytochrome C was detected in paraffin-embedded section of rat brain tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Cytochrome C Antibody (A03529) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

IHC analysis of Cytochrome C using anti-Cytochrome C antibody (A03529). Cytochrome C was detected in paraffin-

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com



embedded section of rat intestine 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 1ug/ml rabbit anti-Cytochrome C Antibody (A03529) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IHC analysis of Cytochrome C using anti-Cytochrome C antibody (A03529). 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 1ug/ml rabbit anti-Cytochrome C Antibody (A03529) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

20 Publications Citing This Product

1. PubMed ID: 10.3892/mmr.2019.9939, Establishment and evaluation of a simulated high□altitude hypoxic brain injury model in SD rats

2. PubMed ID: 10.1016/j.jep.2019.03.028, Rhodiola crenulata attenuates apoptosis and mitochondrial energy metabolism disorder in rats with hypobaric hypoxia-induced brain injury by regulating the HIF-1alpha/microRNA 210/ISCU1/2(COX10) signaling pathway

3. PubMed ID: 10.1016/j.bbrc.2018.04.026, Canstatin modulates L-type calcium channel activity in rat ventricular cardiomyocytes

Visit bosterbio.com/anti-cytochrome-c-picoband-trade-antibody-a03529-boster.html to see all 20 publications.

Anti-Cytochrome C/Cycs Antibody

For Research Use Only. Not for use in diagnostic procedures.