BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-Cytochrome P450 2B6/CYP2B6 Antibody Picoband™

Catalog Number: A00861-2

About CYP2B6

Cytochrome P450 2B6 is an enzyme that in humans is encoded by the CYP2B6 gene. It is mapped to 19q13.2. This gene, CYP2B6, encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by phenobarbital. The enzyme is known to metabolize some xenobiotics, such as the anti-cancer drugs cyclophosphamide and ifosphamide.

Overview

Product Name	Anti-Cytochrome P450 2B6/CYP2B6 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Cytochrome P450 2B6/CYP2B6 Antibody Picoband™ catalog # A00861-2. Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human.
Application	Flow Cytometry, IF, ICC, 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	P20813

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence of human Cytochrome P450 2B6/CYP2B6 (RGKIAMVDPFFRGYGVIFANGNR).
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 ICC.
Cross Reactivity	No cross reactivity with other proteins.

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Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 μg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used Western blot, 0.1-0.5μg/ml Immunocytochemistry/Immunofluorescence, 5μg/ml Flow Cytometry, 1-3μg/1x10^6 cells For protocols please visit https://www.bosterbio.com/protocol-and-troubleshooting/

Anti-Cytochrome P450 2B6/CYP2B6 Antibody Picoband™ (A00861-2) Images

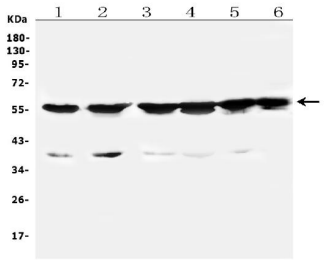

Figure 1. Western blot analysis of CYP2B6 using anti-CYP2B6 antibody (A00861-2).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Caco-2 whole cell lysates,
Lane 2: human HEK293 whole cell lysates,
Lane 3: human PC-3 whole cell lysates,
Lane 4: human HL-60 whole cell lysates,
Lane 5: human K562 whole cell lysates,
Lane 6: human A549 whole cell lysates.
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-CYP2B6 antigen affinity purified polyclonal antibody (Catalog # A00861-2) 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 1:10000 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 CYP2B6 at approximately 56KD. The expected band size for CYP2B6 is at 56KD.

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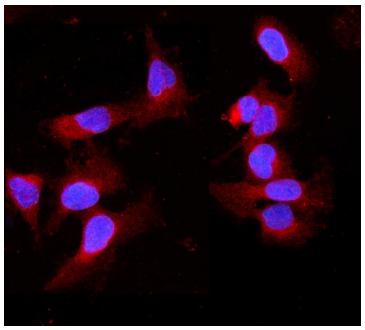

Figure 2. IF analysis of Cytochrome P450 2B6/CYP2B6 using anti-Cytochrome P450 2B6/CYP2B6antibody (A00861-2). Cytochrome P450 2B6/CYP2B6was detected in immunocytochemical section of U20S cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-Cytochrome P450 2B6/CYP2B6 Antibody (A00861-2) overnight at 4°C. DyLight®594 Conjugated Goat Anti-Rabbit IgG (BA1142) 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.

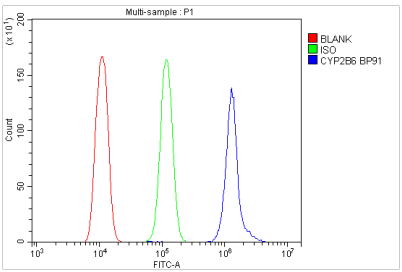

Figure 3. Flow Cytometry analysis of THP-1 cells using anti-Cytochrome P450 2B6/CYP2B6 antibody (A00861-2). Overlay histogram showing THP-1 cells stained with A00861-2 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Cytochrome P450 2B6/CYP2B6Antibody (A00861-2, 1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.