

Anti-Cytochrome P450 2E1/CYP2E1 Antibody Picoband® (monoclonal, 2C7G1)

Catalog Number: M00672-2

About CYP2E1

Cytochrome P450 2E1 (abbreviated CYP2E1), a member of the cytochrome P450 mixed-function oxidase system, is involved in the metabolism of xenobiotics in the body. In humans, the CYP2E1 enzyme is encoded by the CYP2E1 gene. It is mapped to 10q26.3. While it is involved in the oxidative metabolism of a small range of substrates (mostly small polar molecules), there are many important drug interactions mediated by CYP2E1. Most drugs undergo deactivation by CYP2E1, either directly or by facilitated excretion from the body. Also, many substances are bioactivated by CYP2E1 to form their active compounds. In addition, CYP2E1 is an important enzyme for the conversion of ethanol to acetaldehyde and to acetate in humans. In the conversion sequence of acetyl-CoA to glucose, CYP2E1 transforms acetone via acetol into propylene glycol and methylglyoxal, the precursors of pyruvate, acetate and lactate.

Overview

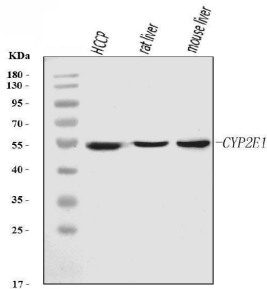
Product Name	Anti-Cytochrome P450 2E1/CYP2E1 Antibody Picoband® (monoclonal, 2C7G1)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Cytochrome P450 2E1/CYP2E1 Antibody Picoband® (monoclonal, 2C7G1) catalog # M00672-2. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. 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	WB
Clonality	Monoclonal 2C7G1
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Mouse
Uniprot ID	P05181

Technical Details

Immunogen	E.coli-derived human Cytochrome P450 2E1/CYP2E1 recombinant protein (Position: H355-S493).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.

Isotype	Mouse IgG2b
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat

Anti-Cytochrome P450 2E1/CYP2E1 Antibody Picoband® (monoclonal, 2C7G1) (M00672-2) Images



Western blot analysis of Cytochrome P450 2E1/CYP2E1 using anti-Cytochrome P450 2E1/CYP2E1 antibody (M00672-2). 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 30 ug of sample under reducing conditions. Lane 1: human HCCP tissue lysates, Lane 2: rat liver tissue lysates, Lane 3: mouse liver tissue 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 mouse anti-Cytochrome P450 2E1/CYP2E1 antigen affinity purified monoclonal antibody (Catalog # M00672-2) 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-mouse 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 # EK1001) with Tanon 5200 system. A specific band was detected for Cytochrome P450 2E1/CYP2E1 at approximately 56 kDa. The expected band size for Cytochrome P450 2E1/CYP2E1 is at 56 kDa.

5 Publications Citing This Product

1. PubMed ID: 10.3109/13880209.2014.898075, Effect of ammonium pyrrolidine dithiocarbamate (PDTC) on NF-kappaB activation and CYP2E1 content of rats with immunological liver injury
2. PubMed ID: 10.1016/j.apsb.2017.04.002, Schisandra sphenanthera extract (Wuzhi Tablet) protects against chronic-binge and acute alcohol-induced liver injury by regulating the NRF2-ARE pathway in mice
3. PubMed ID: 10.1016/j.toxlet.2011.11.030, Furocoumarins affect hepatic cytochrome P450 and renal organic ion transporters in mice

Visit bosterbio.com/anti-cytochrome-p450-2e1-cyp2e1-picoband-trade-antibody-m00672-2-boster.html to see all 5 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Cytochrome P450 2E1/CYP2E1 Antibody (monoclonal, 2C7G1)

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