BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
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Anti-DCI/ECI1 Antibody Picoband®

Catalog Number: PA1763

About ECI1

ECI1/DCI (Dodecenoyl-CoA Delta Isomerase), also known as 3,2-trans-enoyl-CoA isomerase, is an enzyme that catalyzes the conversion of cis-or trans-double bonds of fatty acids at gamma-carbon (position 3) to trans double bonds at beta-carbon (position 2). It plays a particularly important role in the metabolism of unsaturated fatty acids. All classes of enoyl-CoA isomerases belong to a family of enzymes, the hydratase/isomerase or crotonase superfamily, and when examined with x-ray crystallography, exhibit a common structural feature of the family, the N-terminal core with a spiral fold composed of four turns, each turn consisting of two beta-sheets and one alpha-helix. Dodecenoyl-CoA Delta Isomerase is involved in the beta-oxidation, one of the most frequently used pathways in fatty acid degradation, of unsaturated fatty acids with double bonds at odd-numbered carbon positions. It does so by shifting the position of the double bonds in the acyl-CoA intermediates and converting 3-cis or trans-enoyl-CoA to 2-trans-enoyl-CoA.

Overview

Product Name	Anti-DCI/ECI1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-DCI/ECI1 Antibody catalog # PA1763. Tested in Flow Cytometry, 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	Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
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	P42126

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human DCI, different from the related mouse sequence by two amino acids and from the related rat sequence by three amino acids.
Recommended Detection Systems	Boster recommends ECL Plus Western Blotting Substrate (Catalog # AR1196-200) 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

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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	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Flow Cytometry(Fixed), 1-3 ug/1x10^6 cells, Human

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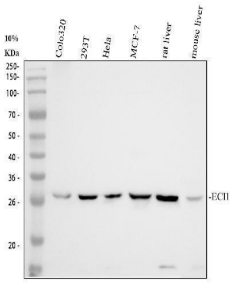
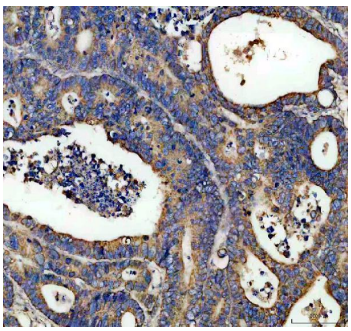
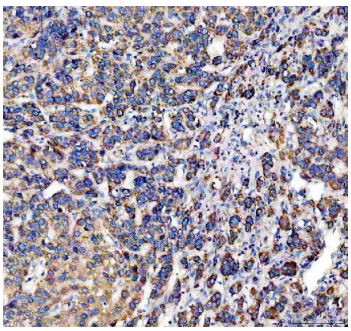
Anti-DCI/ECI1 Antibody Picoband® (PA1763) Images



Western blot analysis of ECI1 using anti-ECI1 antibody (PA1763). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human COLO320 whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human MCF-7 whole cell lysates, Lane 5: rat liver tissue lysates, Lane 6: 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 rabbit anti-ECI1 antigen affinity purified polyclonal antibody (PA1763) 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 ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for ECI1 at approximately 28 kDa. The expected band size for ECI1 is at 33 kDa.



IHC analysis of ECI1 using anti-ECI1 antibody (PA1763). ECI1 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in 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-ECI1 Antibody (PA1763) 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.



IHC analysis of ECI1 using anti-ECI1 antibody (PA1763). ECI1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in 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-ECI1 Antibody (PA1763) 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.

Flow Cytometry analysis of 293T cells using anti-ECI1 antibody (PA1763). Overlay histogram showing 293T cells stained with PA1763 (Blue line). To facilitate intracellular

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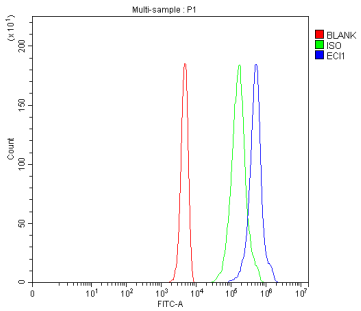

staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ECI1 Antibody (PA1763, 1 ug/1x106 cells) for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Anti-DCI/ECI1 Antibody

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