

Anti-ECE1 Picoband Antibody

Catalog # ABO10252

## Specification

# Anti-ECE1 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP42892HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Endothelin-converting enzyme 1(ECE1) detection. Tested withWB in Human; Mouse; Rat.WB

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-ECE1 Picoband Antibody - Additional Information

Gene ID 1889

**Other Names** Endothelin-converting enzyme 1, ECE-1, 3.4.24.71, ECE1

Calculated MW 87164 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

Subcellular Localization Cell membrane; Single-pass type II membrane protein.

**Tissue Specificity** 

All isoforms are expressed in umbilical vein endothelial cells, polynuclear neutrophils, fibroblasts, atrium cardiomyocytes and ventricles. Isoforms A, B and C are also expressed in placenta, lung, heart, adrenal gland and phaeochromocytoma; isoforms A and C in liver, testis and small intestine; isoform B, C and D in endothelial cells and umbilical vein smooth muscle cells; isoforms C and D in saphenous vein cells, and isoform C in kidney.

**Protein Name** Endothelin-converting enzyme 1

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen E.coli-derived human ECE1 recombinant protein (Position: M18-T233). Human ECE1 shares 94%



and 93.5% amino acid (aa) sequence identity with mouse and rat ECE1, respectively.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

## Anti-ECE1 Picoband Antibody - Protein Information

Name ECE1

**Function** Converts big endothelin-1 to endothelin-1.

**Cellular Location** Cell membrane; Single-pass type II membrane protein

Tissue Location

All isoforms are expressed in umbilical vein endothelial cells, polynuclear neutrophils, fibroblasts, atrium cardiomyocytes and ventricles. Isoforms A, B and C are also expressed in placenta, lung, heart, adrenal gland and phaeochromocytoma; isoforms A and C in liver, testis and small intestine; isoform B, C and D in endothelial cells and umbilical vein smooth muscle cells; isoforms C and D in saphenous vein cells, and isoform C in kidney

## Anti-ECE1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-ECE1 Picoband Antibody - Images



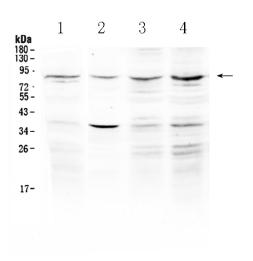


Figure 1. Western blot analysis of ECE1 using anti- ECE1 antibody (ABO10252). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: mouse heart tissue lysates, Lane 3: mouse testis tissue lysates, Lane 4: HELA 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- ECE1 antigen affinity purified polyclonal antibody (Catalog # ABO10252) at 0.5  $1\frac{1}{4}$ g/mL overnight at 4ŰC, 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 with Tanon 5200 system. A specific band was detected for ECE1 at approximately 87KD. The expected band size for ECE1 is at 87KD.

## Anti-ECE1 Picoband Antibody - Background

Endothelin converting enzyme 1, also known as ECE1, is an enzyme which in humans is encoded by the ECE1 gene. The protein encoded by this gene is involved in proteolytic processing of endothelin precursors to biologically active peptides. Mutations in this gene are associated with Hirschsprung disease, cardiac defects and autonomic dysfunction. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.