ECE-1 (C-12): sc-376018

**BACKGROUND**

Endothelin converting enzymes (ECE-1 and ECE-2) are type II metalloproteases that convert big endothelin-1 to vasoactive endothelin-1. Both ECE-1 and ECE-2 belong to the peptidase family M13 and are Type II membrane proteins. There are several different isoforms of each enzyme. The expression of the protein may therefore vary. All isoforms are expressed in umbilical endothelial cells, atrium cardiomyocites and ventricles, polynuclear neutrophils and fibroblasts. Endothelin-converting enzyme-1 (ECE-1) converts big endothelin-1 to endothelin-1 by catalyzing the cleavage of the trp21-val22 bond in the pre-cursor. The ECE-1 gene produces four isoforms from alternate promoters. The isoforms share the same extracellular catalytic domain and contain unique cytosolic tails, which results in their specific subcellular targeting.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ECE1 (human) mapping to 1p36.12; Ece1 (mouse) mapping to 4 D3.

**SOURCE**

ECE-1 (C-12) is a mouse monoclonal antibody raised against amino acids 331-390 mapping within an extracellular domain of ECE-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

ECE-1 (C-12) is recommended for detection of ECE-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ECE-1 siRNA (h): sc-44478, ECE-1 siRNA (m): sc-44479, ECE-1 shRNA Plasmid (h): sc-44478-SH, ECE-1 shRNA Plasmid (m): sc-44479-SH, ECE-1 shRNA (h) Lentiviral Particles: sc-44478-V and ECE-1 shRNA (m) Lentiviral Particles: sc-44479-V.

Molecular Weight of ECE-1: 130 kDa.

Positive Controls: HUV-EC-C whole cell lysate: sc-364180.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk BP-HRP (Cruz Marker). ECE-1 (C-12): sc-376018. Western blot analysis of ECE-1 expression in HUV-EC-C whole cell lysate.

**DATA**

![Western blot analysis of ECE-1 expression in HUV-EC-C whole cell lysate](image)

![Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic staining of glandular cells](image)

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.