**BACKGROUND**

Angiotensin-converting enzyme (ACE) is a carboxyl-terminal dipeptidyl exopeptidase that converts Angiotensin I to the potent vasoactive hormone, Angiotensin II. There are two isoforms of ACE, the pulmonary ACEP and the testicular ACET. ACEP is a glycoprotein expressed in vascular endothelial cells of the lung, liver, adrenal cortex, pancreas, kidney and spleen. The ACET isoform is expressed exclusively in adult testis by developing sperm cells, specifically late pachytene sperm atocytes. Additionally, ACE inactivates bradykinin, a vasodepressor peptide, and is involved in blood pressure regulation and fluid/electrolyte homeostasis. ACET is the first known human homolog of ACE. Unlike ACE, which is expressed ubiquitously throughout the vasculature, ACET is expressed only in cardiac, renal and testicular cells.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ACE (human) mapping to 17q23.3; Ace (mouse) mapping to 11E1.

**SOURCE**

ACE (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1279-1306 at the C-terminus of ACE of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-374198 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

ACE (B-6) is recommended for detection of ACE somatic and testis isoforms 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ACE siRNA (h): sc-29626, ACE siRNA (m): sc-29627, ACE shRNA Plasmid (h): sc-29626-SH, ACE shRNA Plasmid (m): sc-29627-SH, ACE shRNA (h) Lentiviral Particles: sc-29626-V and ACE shRNA (m) Lentiviral Particles: sc-29627-V.

Molecular Weight of ACE: 195 kDa.

Positive Controls: mouse kidney extract: sc-2255, 3T3-L1 cell lysate: sc-2243 or K-562 whole cell lysate: sc-2203.

**RECOMMENDED SUPPORT REAGENTS**

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


**DATA**

ACE (B-6): sc-374198. Western blot analysis of ACE expression in K-562 (A) and 3T3-L1 (B) whole cell lysates.

ACE (B-6): sc-374198. Western blot analysis of ACE expression in mouse kidney (A) and human kidney (B) tissue extracts.

**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 website at www.scbt.com for detailed protocols and support products.

See ACE (2E2): sc-23908 for ACE antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.