BACKGROUND

Angiotensin-converting enzyme (ACE) is a carboxyl-terminal dipeptidyl exopeptidase that converts Angiotensin I to the potent vasopressive 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 spermatocytes. Additionally, ACE inactivates bradykinin, a vasodepressor peptide, and is involved in blood pressure regulation and fluid/electrolyte homeostasis. ACE2 is the first known human homolog of angiotensin-converting enzyme (ACE). Unlike ACE, which is expressed ubiquitously throughout the vasculature, ACE2 is expressed only in cardiac, renal and testicular cells.

CHROMOSOMAL LOCATION

Genetic locus: ACE2 (human) mapping to Xp22.2; Ace2 (mouse) mapping to X F5.

SOURCE

ACE2 (H-175) is a rabbit polyclonal antibody raised against amino acids 631-805 of ACE2 of human origin.

PRODUCT

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

Available as agarose conjugate for immunoprecipitation, sc-20998 AC, 500 µg/0.25 ml agarose in 1 ml.

APPLICATIONS

ACE2 (H-175) is recommended for detection of ACE2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).


Molecular Weight of ACE2: 90 kDa.

Positive Controls: ACE2 (m): 293T Lysate: sc-118196, mouse kidney extract: sc-2255 or Hs 181 Tes whole cell lysate (A) and mouse kidney tissue extract (B).

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.

DATA

ACE2 (H-175) sc-20998 Western blot analysis of ACE2 expression in Hs 181.Tes whole cell lysate (A) and mouse kidney tissue extract (B).

SELECT PRODUCT CITATIONS


