

A11357

Leader in Biomolecular Solutions for Life Science



ACE1 Rabbit mAb

Catalog No.: A11357

Recombinant

Basic Information

Observed MW

170kDa

Calculated MW

150kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

WB,IP,ELISA

Cross-Reactivity

Mouse,Rat

CloneNo number

ARC0577

Background

This gene encodes an enzyme involved in blood pressure regulation and electrolyte balance. It catalyzes the conversion of angiotensin I into a physiologically active peptide angiotensin II. Angiotensin II is a potent vasopressor and aldosterone-stimulating peptide that controls blood pressure and fluid-electrolyte balance. This angiotensin converting enzyme (ACE) also inactivates the vasodilator protein, bradykinin. Accordingly, the encoded enzyme increases blood pressure and is a drug target of ACE inhibitors, which are often prescribed to reduce blood pressure. This enzyme additionally plays a role in fertility through its ability to cleave and release GPI-anchored membrane proteins in spermatozoa. Many studies have associated the presence or absence of a 287 bp Alu repeat element in this gene with the levels of circulating enzyme. This polymorphism, as well as mutations in this gene, have been implicated in a wide variety of diseases including cardiovascular pathophysiologies, psoriasis, renal disease, stroke, and Alzheimer's disease. Regulation of the homologous ACE2 gene may be involved in progression of disease caused by several human coronaviruses, including SARS-CoV and SARS-CoV-2. Alternative splicing results in multiple transcript variants encoding both somatic (sACE) and male-specific testicular (tACE) isoforms.

Recommended Dilutions

WB 1:500 - 1:1000

IP 0.5µg-4µg antibody for
400µg-600µg extracts
of whole cells

ELISA Recommended starting
concentration is 1
µg/mL. Please optimize
the concentration
based on your specific
assay requirements.

Immunogen Information

Gene ID

1636

Swiss Prot

P12821

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1200-1306 of human ACE1 (P12821).

Synonyms

DCP; ACE1; DCP1; CD143

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

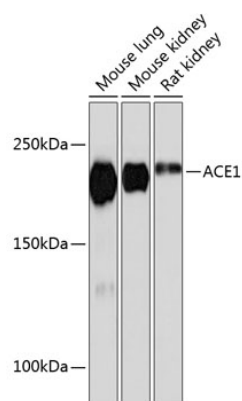
Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

Contact



www.abclonal.com

Validation Data



Western blot analysis of various lysates using ACE1 Rabbit mAb (A11357) at 1 : 1000 dilution.

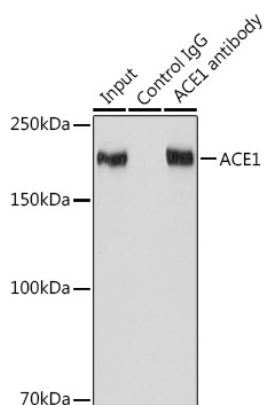
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.



Immunoprecipitation analysis of 600 µg extracts of Mouse kidney cells using 3 µg ACE1 antibody (A11357). Western blot was performed from the immunoprecipitate using ACE1 antibody (A11357) at a dilution of 1:1000.