

A7665

Leader in Biomolecular Solutions for Life Science



ACE1 Rabbit pAb

Catalog No.: A7665

Basic Information

Observed MW

200kDa

Calculated MW

150kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,ELISA

Cross-Reactivity

Human,Mouse,Rat

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 pathophysiology, 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 - 1:2000
IHC-P	1:50 - 1:100

Immunogen Information

Gene ID

1636

Swiss Prot

P12821

Immunogen

A synthetic peptide of human ACE11

Synonyms

DCP; ACE1; DCP1; CD143

Contact



www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

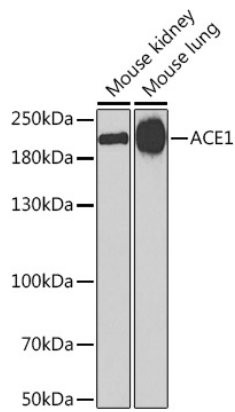
Affinity purification

Storage

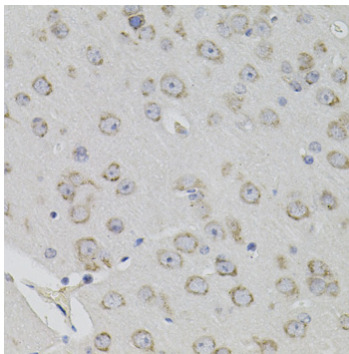
Store at -20°C. Avoid freeze / thaw cycles.

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

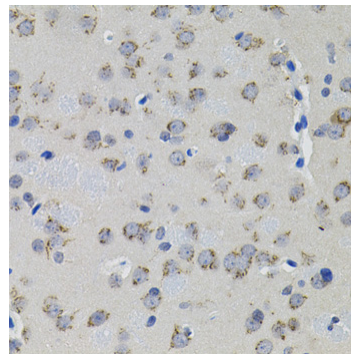
Validation Data



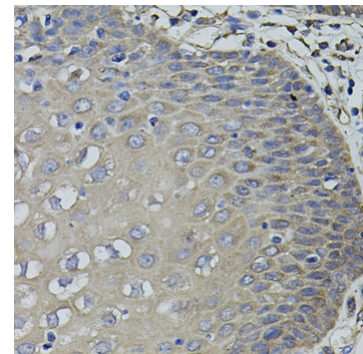
Western blot analysis of various lysates using ACE1 Rabbit pAb (A7665) at 1:500 dilution.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 μ g per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90s.



Immunohistochemistry analysis of ACE1 in paraffin-embedded mouse brain using ACE1 Rabbit pAb (A7665) (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunohistochemistry analysis of ACE1 in paraffin-embedded rat brain using ACE1 Rabbit pAb (A7665) (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunohistochemistry analysis of ACE1 in paraffin-embedded human esophagus using ACE1 Rabbit pAb (A7665) (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.