

ACE1 Polyclonal Antibody

Catalog No: YT0076

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: ACE

Fields: >>Renin-angiotensin system;>>Renin secretion;>>Chagas

disease;>>Coronavirus disease - COVID-19;>>Hypertrophic

cardiomyopathy;>>Diabetic cardiomyopathy

Gene Name: ACE

Protein Name: Angiotensin-converting enzyme

P12821

P09470

Human Gene Id: 1636

Human Swiss Prot

No:

Mouse Gene Id: 11421

Mouse Swiss Prot

No:

Rat Gene ld: 24310

Rat Swiss Prot No: P47820

Immunogen: The antiserum was produced against synthesized peptide derived from human

ACE1. AA range:891-940

Specificity: ACE1 Polyclonal Antibody detects endogenous levels of ACE1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 165kD

Cell Pathway: Renin-angiotensin system; Hypertrophic cardiomyopathy (HCM);

Background: This gene encodes an enzyme involved in catalyzing 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 enzyme plays a key role in the reninangiotensin system. Many studies have associated the presence or absence of a 287 bp Alu repeat element in this gene with the levels of circulating enzyme or cardiovascular pathophysiologies. Multiple alternatively spliced transcript variants encoding different isoforms have been identified, and two most abundant spliced variants encode the somatic form and the testicular form, respectively, that are

equally active. [provided by RefSeq, May 2010],

Function: catalytic activity:Release of a C-terminal dipeptide, oligopeptide-|-Xaa-Yaa,

when Xaa is not Pro, and Yaa is neither Asp nor Glu. Thus, conversion of angiotensin I to angiotensin II, with increase in vasoconstrictor activity, but no action on angiotensin II.,cofactor:Binds 2 zinc ions per subunit. The Testis-specific isoform only binds 1 zinc ion per subunit.,cofactor:Binds 3 chloride ions per subunit.,disease:Defects in ACE are a cause of renal tubular dysgenesis (RTD) [MIM:267430]. RTD is an autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal death, probably due to pulmonary hypoplasia from early-onset oligohydramnios (the

Potter phenotype)., disease: Genetic variations in ACE could influence susceptibility to diabetic nephropathy [MIM:612624]; also called susceptibility to

microvascular complications of diabetes type 3

Subcellular [Angiotensin-converting enzyme, soluble form]: Secreted.; Cell membrane; Location: Single-pass type I membrane protein. Cytoplasm. Detected in both cell

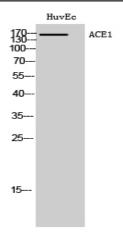
membrane and cytoplasm in neurons. .

Expression: Ubiquitously expressed, with highest levels in lung, kidney, heart,

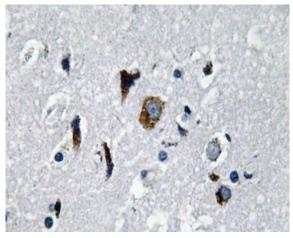
gastrointestinal system and prostate. Isoform Testis-specific is expressed in

spermatocytes and adult testis.

Products Images



Western Blot analysis of HuvEc cells using ACE1 Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of ACE1 antibody in paraffinembedded human brain tissue.



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Western blot analysis of lysates from mouse kidney, using ACE1 antibody.