

## **ACE1 Monoclonal Antibody**

Catalog No: YM1002

**Reactivity:** Human; Mouse; Rat; Bovine

**Applications:** WB

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: Purified recombinant human ACE1 (N-terminus) protein fragments expressed in

E.coli.

**Specificity:** ACE1 Monoclonal Antibody detects endogenous levels of ACE1 protein.

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

**Source:** Monoclonal, Mouse

**Dilution:** WB 1:1000 - 1:2000. Not yet tested in other applications.

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**Purification :** Affinity purification

**Concentration:** 1 mg/ml

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

Molecularweight: 150kD

**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 Location:

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

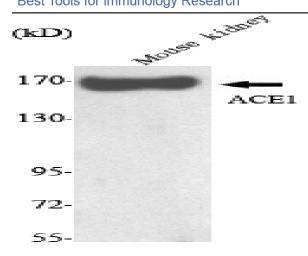
membrane and cytoplasm in neurons. .

**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 using ACE1 Monoclonal Antibody against mouse kidney lysate.