

Angiotensin Converting Enzyme 1 mouse mAb

Catalog No :	YM1270
Reactivity :	Mouse
Applications :	WB
Target :	ACE
Fields :	>>Renin-angiotensin system;>>Renin secretion;>>Chagas disease;>>Coronavirus disease - COVID-19;>>Hypertrophic cardiomyopathy;>>Diabetic cardiomyopathy
Gene Name :	ace
Human Gene Id :	1636
Human Swiss Prot No :	P12821
Mouse Swiss Prot No :	P09470
Immunogen :	Purified recombinant human Angiotensin Converting Enzyme 1 protein fragments expressed in E.coli.
Specificity :	This antibody detects endogenous levels of Angiotensin Converting Enzyme 1 and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb 1:1000
Purification :	The antibody was affinity-purified from mouse ascites 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 : 190kD

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 renin-angiotensin 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 pathophysiology. 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.

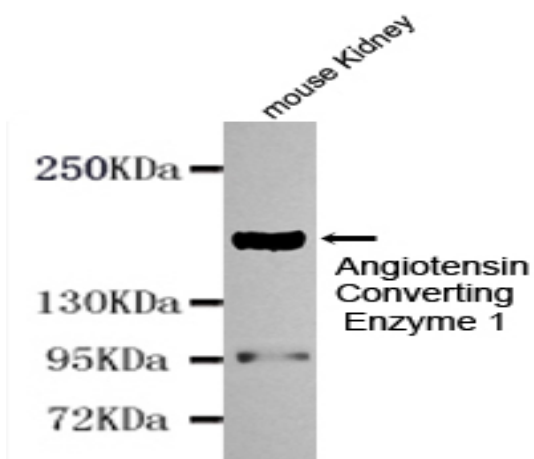
Sort : 2023

No4 : 1

Host : Mouse

Modifications : Unmodified

Products Images



Western blot detection of Angiotensin Converting Enzyme 1 in Mouse kidney cell lysates using Angiotensin Converting Enzyme 1 mouse mAb (1:1000 diluted). Predicted band size:150KDa.Observed band size:190KDa.