



Angiotensin Converting Enzyme 1 mouse mAb

Catalog No	YP-Ab-02359
Isotype	IgG
Reactivity	Mouse
Applications	WB
Gene Name	ace
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
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:1000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ACE1;Angiotensin converting enzyme;Angiotensin-converting enzyme;soluble form;DCP;ACE;ACE 1;ACE T;ACE_HUMAN;Angiotensin converting enzyme somatic isoform;Angiotensin converting enzyme testis specific isoform; Angiotensin I converting enzyme;Angiotensin I converting enzyme 1;Angiotensin I converting enzyme peptidyl dipeptidase A 1;Carboxycathepsin;CD 143;CD143; CD143 antigen;DCP 1;DCP1;Dipeptidyl carboxypeptidase 1;Dipeptidyl carboxypeptidase I;Kininase II;MGC26566;MVCD3;Peptidase P;Peptidyl dipeptidase A;Testicular ECA.
Observed Band	190kD
Calculated Molecular Weight	190kD
Cell Pathway	[Angiotensin-converting enzyme, soluble form]: Secreted.; Cell membrane; Single-pass type I membrane protein. Cytoplasm . Detected in both cell membrane and cytoplasm in neurons. .
Tissue Specificity	Ubiquitously expressed, with highest levels in lung, kidney, heart, gastrointestinal system and prostate. Isoform Testis-specific is expressed in spermatocytes and adult testis.



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

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 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],

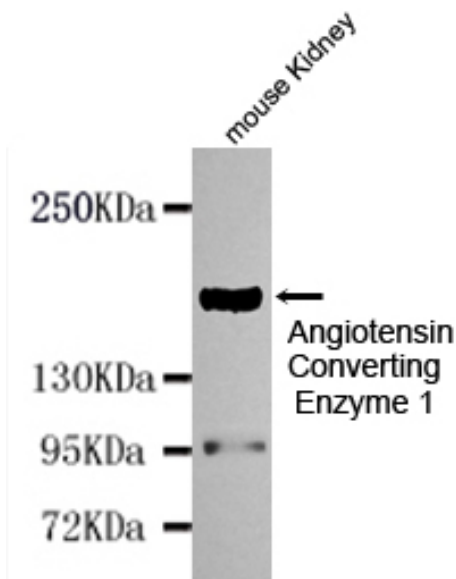
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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.