



ACE1 Monoclonal Antibody

Catalog No	YP-Ab-02343
Isotype	IgG
Reactivity	Human;Mouse;Rat;Bovine
Applications	WB
Gene Name	ACE
Protein Name	Angiotensin-converting enzyme
Immunogen	Purified recombinant human ACE1 (N-terminus) protein fragments expressed in E.coli.
Specificity	ACE1 Monoclonal Antibody detects endogenous levels of ACE1 protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ACE; DCP; DCP1; Angiotensin-converting enzyme; ACE; Dipeptidyl carboxypeptidase I; Kininase II; CD antigen CD143
Observed Band	
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 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],

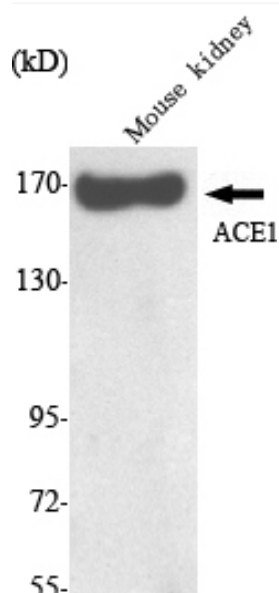
matters needing attention

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 analysis using ACE1 Monoclonal Antibody against mouse kidney lysate.