

Basic Information

Product Name	Anti-ACE Antibody (Clone#ADCO-1)		
Gene Name	ACE		
Source	Rabbit		
Clonality	Monoclonal		
Isotype	IgG		
Species Reactivity	human, mouse, rat		
Tested Application	WB, IHC, FCM		
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.		
Immunogen	A synthesized peptide derived from human ACE1 Converts angiotensin I to angiotensin II by release of the terminal His-Leu, this results in an increase of the vasoconstrictor activity of angiotensin. Also able to inactivate bradykinin, a potent vasodilator. Has also a glycosidase activity which releases GPI-anchored proteins from the membrane by cleaving the mannose linkage in the GPI moiety.		
Concentration	500 ug/ml		
Purification	Affinity-chromatography		
Observed MW	150-180 kDa		
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-200 Flow Cytometry (FCM): 1:20		

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Angiotensin-converting enzyme (ACE), an exopeptidase, is a circulating enzyme that participates in the body's renin-angiotensin system(RAS), which mediates extracellular volume (i.e. that of the blood plasma, lymph and interstitial fluid), and arterial vasoconstriction. It is secreted by pulmonary and renal endothelial cells and catalyzes the conversion of decapeptide angiotensin I to octapeptide angiotensin II. Using a DNA marker at the growth hormone gene locus, which they characterized as 'extremely polymorphic' and which showed no recombination with ACE, ACE was mapped to 17q22-q24, consistent with the in situ hybridization mapping to 17q23. ACE, or kininase II, is a dipeptidyl carboxypeptidase that plays an important role in blood pressure regulation and electrolyte balance by hydrolyzing angiotensin I into angiotensin II, a potent vasopressor, and

aldosterone-stimulating peptide. The enzyme is also able to inactivate bradykinin, a potent vasodilator.

Selected Validation Data

