



ACE peptide (DAG-P0167)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Antigen Description | 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] |
| Specificity | Ubiquitously expressed, with highest levels in lung, kidney, heart, gastrointestinal system and prostate. Isoform Testis-specific is expressed in spermatocytes and adult testis. |
| Purity | > 95 % by SDS-PAGE. |
| Conjugate | Unconjugated |
| Applications | ELISA, WB |
| Sequence Similarities | Belongs to the peptidase M2 family. |
| Format | Liquid |
| Buffer | Preservative: None Constituents: 0.001% Tween 20, 30mM HEPES, 2mM EDTA, 150mM Sodium chloride, pH 6.75 |
| Preservative | None |
| Storage | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Preservative: None Constituents: 0.001% Tween 20, 30mM HEPES, 2mM EDTA, 150mM Sodium chloride, pH 6.75 |

GENE INFORMATION

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| Gene Name | ACE angiotensin I converting enzyme [Homo sapiens (human)] |
| Official Symbol | ACE |
| Synonyms | ACE; angiotensin I converting enzyme; DCP; ICH; ACE1; DCP1; CD143; MVCD3; angiotensin-converting enzyme; kininase II; peptidase P; CD143 antigen; testicular ECA; carboxycathepsin; dipeptidyl carboxypeptidase 1; dipeptidyl carboxypeptidase I; angiotensin converting enzyme, somatic isoform; angiotensin I converting enzyme (peptidyl-dipeptidase A) 1; angiotensin I converting enzyme peptidyl-dipeptidase A 1 transcript; |
| Entrez Gene ID | 1636 |
| mRNA Refseq | NM_000789.3 |
| Protein Refseq | NP_000780.1 |
| UniProt ID | B4DKH4 |
| Chromosome Location | 17q23.3 |
| Pathway | ACE Inhibitor Pathway, organism-specific biosystem; Chagas disease (American trypanosomiasis), organism-specific biosystem; Chagas disease (American trypanosomiasis), conserved biosystem; Hypertrophic cardiomyopathy (HCM), organism-specific biosystem; Hypertrophic cardiomyopathy (HCM), conserved biosystem; Metabolism of Angiotensinogen to Angiotensins, organism-specific biosystem; Metabolism of proteins, organism-specific biosystem; Peptide hormone metabolism, organism-specific biosystem; Renin- |
| Function | actin binding; bradykinin receptor binding; carboxypeptidase activity; chloride ion binding; drug binding; endopeptidase activity; metallopeptidase activity; metallopeptidase activity; peptidyl-dipeptidase activity; peptidyl-dipeptidase activity; protein |