ACE1 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	ACE1, Blocking Peptide
Full Product Name	ACE1 Blocking Peptide
Product Gene Name	ACE1 blocking peptide
Product Synonym Gene Name	ACE
Product Synonym Names	ACE 1; ACE; ACE T; ACE_HUMAN; ACE1; Angiotensin converting enzyme somatic isoform; Angiotensin converting enzyme testis specific isoform; Angiotensin I converting enzyme 1; Angiotensin I converting enzyme; Angiotensin I converting enzyme peptidyl dipeptidase A 1; angiotensin I converting enzyme peptidyl-dipeptidase A 1 transcript; Angiotensin-converting enzyme; Carboxycathepsin; CD 143; CD143; CD143 antigen; DCP 1; DCP; DCP1; Dipeptidyl carboxypeptidase 1; Dipeptidyl carboxypeptidase I; Kininase II; MGC26566; MVCD3; Peptidase P; Peptidyl dipeptidase A; soluble form; Testicular ECA
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	ACE1 peptide (MBS9616902) is used for blocking the activity of ACE1 antibody (MBS9601370)
Molecular Weight	195kDa
Chromosome Location	Chromosome: 17; NC_000017.10 (61554422..61575741). Location: 17q23.3
OMIM	106180
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for ACE1 blocking peptide	Blocking/Control
Related Product Information for ACE1 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of ACE1 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ACE1 purchase	MBS9616902 is a blocking peptide targeting ACE1.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ACE1. It may not necessarily be applicable to this product.

NCBI GI #	4503273

NCBI GeneID	1636
NCBI Accession #	NP_000780.1
UniProt Primary Accession #	P12821
UniProt Secondary Accession #	P22966; Q53YX9; Q59GY8; Q7M4L4; B0LPF0; B4DXI3; E7EU16
UniProt Related Accession #	P12821
GenBank Nucleotide #	NM_000789.3
NCBI Official Full Name	angiotensin-converting enzyme isoform 1
NCBI Official Synonym Full Names	angiotensin I converting enzyme
NCBI Official Symbol	ACE
NCBI Official Synonym Symbols	DCP; ICH; ACE1; DCP1; CD143; MVCD3
UniProt Protein Name	Angiotensin-converting enzyme
UniProt Synonym Protein Names	Dipeptidyl carboxypeptidase I; Kininase II
Protein Family	Zinc finger transcription factor
UniProt Gene Name	ACE
UniProt Synonym Gene Names	DCP; DCP1; ACE
UniProt Entry Name	ACE_HUMAN
NCBI Protein Information	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 (peptid

UniProt Comments for ACE1	ACE: 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. Genetic variations in ACE may be a cause of susceptibility to ischemic stroke (ISCHSTR); also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and environmental risk factors. Defects in ACE are a cause of renal tubular dysgenesis (RTD). 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). Genetic variations in ACE are associated with susceptibility to microvascular complications of diabetes type 3 (MVCD3). These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new- onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis. Defects in ACE are a cause of susceptibility to intracerebral hemorrhage (ICH). A pathological condition characterized by bleeding into one or both cerebral hemispheres including the basal ganglia and the cerebral cortex. It is often associated with hypertension and craniocerebral trauma. Intracerebral bleeding is a common cause of stroke. Belongs to the peptidase M2 family. 4 isoforms of the human protein are produced by alternative splicing. Protein type: Protease; Membrane protein, integral; EC 3.4.15.1 Chromosomal Location of Human Ortholog: 17q23.3 Cellular Component: extracellular space; lysosome; extracellular region; integral to membrane; plasma membrane; endosome; external side of plasma membrane Molecular Function: peptidyl-dipeptidase activity; tripeptidyl-peptidase activity; metallopeptidase activity; zinc ion binding; carboxypeptidase activity; mitogen-activated protein kinase kinase binding; drug binding; actin binding; protein binding; bradykinin receptor binding; endopeptidase activity; exopeptidase activity; mitogen-activated protein kinase binding; chloride ion binding Biological Process: mononuclear cell proliferation; regulation of vasodilation; neutrophil mediated immunity; angiotensin mediated regulation of renal output; regulation of angiotensin metabolic process; arachidonic acid secretion; proteolysis; angiotensin maturation; regulation of systemic arterial blood pressure by renin-angiotensin; antigen processing and presentation of peptide antigen via MHC class I; cellular protein metabolic process; regulation of smooth muscle cell migration; heart contraction; peptide catabolic process; regulation of vasoconstriction; beta-amyloid metabolic process; regulation of blood pressure; angiotensin catabolic process in blood; blood vessel remodeling; hormone catabolic process; spermatogenesis; kidney development Disease: Renal Tubular Dysgenesis; Microvascular Complications Of Diabetes, Susceptibility To, 3; Alzheimer Disease; Hemorrhage, Intracerebral, Susceptibility To
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