

Recombinant Human ACE, His-tagged

Cat. No. ACE-744H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human ACE ectodomain (amino acids 30-1261) fused at the C-terminus to a His•Tag sequence and expressed in <i>NSO cells</i> . By SDS-PAGE, the apparent molecular weight of the glycosylated protein appears larger to be than 120 kDa under both reducing and non-reducing conditions.
Species	Human
Source	Mammalian Cells
ProteinLength	30-1261 a.a.
Description	ACE is a zinc metallopeptidase that cleaves the C-terminal dipeptide from angiotensin I to produce the potent vasopressor octapeptide angiotensin II. ACE gene polymorphism has been a recent topic in Alzheimer"s disease studies. ACE is a type I membrane protein and exists in two isoforms, somatic and germinal.
Purity	≥95% by SDS-PAGE.
Form	Liquid. In 75 mM NaCl, 12.5 mM Tris, 500 nM ZnCl ₂ , 40% glycerol, pH 7.5. Please refer to vial label for lot-specific concentration.
Endotoxins	≤1.0 EU/μg ACE.
Specific Activity	≥1 unit/μg protein.

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Unit Definition	One unit is defined as the amount of enzyme that will cleave 1 nmol MCA-RPPGFSAFK(DNP)-OH per min at 25°C, pH 6.5.
Toxicity	Standard Handling(MSDS available upon request).
Storage	≤ -70°C. Avoid freeze/thaw. Following initial thaw, aliquot and freeze (-70°C).
GENE INFORMATION	
Gene Name	ACE angiotensin I converting enzyme (peptidyl-dipeptidase A) 1 [Homo sapiens]
Synonyms	ACE; angiotensin I converting enzyme (peptidyl-dipeptidase A) 1; DCP; ACE1; DCP1; CD143; MVCD3; MGC26566; angiotensin-converting enzyme; kininase II; peptidase P; CD143 antigentesticular ECA; carboxycathepsin; dipeptidyl carboxypeptidase 1; dipeptidyl carboxypeptidase I; angiotensin converting enzyme, somatic isoform; EC 3.4.15.1; Angiotensin-converting enzyme, soluble form
Gene ID	1636
mRNA Refseq	NM_000789
Protein Refseq	NP_000780
MIM	106180
UniProt ID	P12821
Chromosome Location	17q23.3
Pathway	Chagas disease; Hypertrophic cardiomyopathy (HCM); Renin-angiotensin system

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Function

actin binding; bradykinin receptor binding; carboxypeptidase activity; chloride ion binding; drug binding; metal ion binding; metallopeptidase activity; peptidase activity; peptide binding; peptidyl-dipeptidase activity; protein binding; zinc ion binding

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