

Recombinant Human ACE Protein

Catalog Number: ATGP3944

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

30-1256aa

UniProt No.

P12821

NCBI Accession No.

NP_000780

Alternative Names

Angiotensin-converting enzyme, Dipeptidyl carboxypeptidase I, Kininase II, ACE1, CD143, DCP, DCP1

PRODUCT SPECIFICATION

Molecular Weight

142kDa(1235aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

<1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 1,000 pmol/min/mg, and is defined as the amount of enzyme that cleaves 1pmol of Mca-RPPGFSAFK(Dnp)-OH per minute at 25C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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Description

ACE, also known as peptidyl-dipetidase A, is a zinc metallopeptidase important for blood pressure control and water and salt metabolism. It converts angiotensin I to angiotensin II by release of the terminal His-Leu, this results in an increase of the vasoconstrictor activity of angiotensin. It's able to inactivate bradykinin, a potent vasodilator. It has also a glycosidase activity which releases GPI-anchored proteins from the membrane by cleaving the mannose linkage in the GPI moiety. Recombinant human ACE/CD143, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

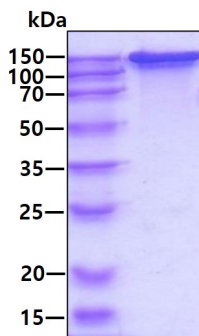
LDPGLQPGNF SADEAGAQLF AQSYNSSAEQ VLFQSVAASW AHDTNITAEN ARRQEEAALL SQEFAEAWGQ KAKELYEPIW QNFTDPQLRR IIGAVRTLGS ANLPLAKRQQ YNALLSNMSR IYSTAKVCLP NKTATCWSLD PDLTNILASS RSYAMLLFAW EGWHNAAGIP LKPLYEDFTA LSNEAYKQDG FDTDGAYWRS WYNSPTFEDD LEHLYQQLEP LYLNLHAFVR RALHRRYGDR YINLRGPIPA HLLGDMWAQS WENIYDMVVP FPDKPNLDVT STMLQQGWNA THMFRVAEEF FTSLELSPMP PEFWEGSMLE KPADGREVVC HASAWDFYNR KDFRIKQCTR VTMDQLSTVH HEMGHIQYYL QYKDLPVSLR RGANPGFHEA IGDVLAHSV TPEHLHKIGL LDRVNTDTE S DINYLLKMAL EKIAFLPGFY LVDQWRWGVF SGRTPPSRYN FDWWYLRTKY QGICPPVTRN ETHFDAGAKF HVPNVTPYIR YFVSFVLQFQ FHEALCKEAG YEGPLHQCDI YRSTKAGAKL RKVLQAGSSR PWQEVLKDMV GLDALDAQPL LKYFQPVTQW LQEQNQNGE VLGWPEYQWH PPLPDNYPEG IDLVTDEAEA SKFVEEYDRT SQVWNEYAE ANWNYNTNIT TETSKILLQK NMQIANHTLK YGTQARKFDV NQLQNTTIKR IIKKVQDLER AALPAQELEE YNKILLDMET TYSVATVCHP NGSCQLQLEPD LTNVMATSRK YEDLLWAWEG WRDKAGRAIL QFYPKYVELI NQAARLNGYV DAGDSWRSMY ETPSLEQDLE RLFQELQPLY LNLHAYVRRR LHRHYGAQHI NLEGPIAHL LGNMWAQTWS NIYDLVPPFP SAPSMDTTEA MLKQGWTPRR MFKEADDFFT SLGLLPVPPE FWNKSMLEKP TDGREVVCHA SAWDFYNGKD FRIKQCTTVN LEDLVVAHHE MGHIQYFMQY KDLPVALREG ANPGFHEAIG DVLALSVESTP KHLHSLNLLS SEGGSDHDI NFLMKMALDK IAFIPFSYLV DQWRWRVFDG SITKENYNQE WWSLRLKYQG LCPPVPRTQG DFDPGAKFHI PSSVPYIRYF VSFIIQFQFH EALCQAAGHT GPLHKCDIYQ SKEAGQRLAT AMKLGFSRPW PEAMQLITGQ PNMSASAMLS YFKPLLDWLR TENELHGEKL GWPQYNWTPN SARSEGPLPD SGRVSFLGLD LDAQQAR<VEH HHHHH>

General References

Amati E., et al, (2018) Stem Cell Res Ther. 9:10.
Metzger R., et al, (2000) Atherosclerosis. 150:21-31.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain