

32-6629: ACE Human

Application : Functional Assay

Alternative Name : Angiotensin-converting enzyme, ACE, Dipeptidyl carboxypeptidase I, Kininase II, CD_antigen: CD143, DCP, DCP1, ACE1, CD143

Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

Angiotensin Converting Enzyme (ACE) is a zinc metallopeptidase vital for blood pressure control and salt and water metabolism. ACE converts angiotensin I to angiotensin II by release of the terminal His-Leu which causes the vasoconstrictor activity of angiotensin to increase. ACE inactivates bradykinin, a potent vasodilator and has also a glycosidase activity which releases GPI-anchored proteins from the membrane by cleaving the mannose linkage in the GPI moiety.

ACE Human produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 1235 amino acids (30-1256 a.a.) and having a molecular mass of 142kDa. ACE is expressed with an 8 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : ACE protein solution (0.25mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : LDPGLQPGNF SADEAGAQLF AQSYNSSAEQ VLFQSVASW AHDTNITAEN ARRQEEAALL
SQEFAEAWGQ KAKELYEPIW QNFTDPQLRR IIGAVRTLGS ANLPLAKRQQ YNALLSNMSR IYSTAKVCLP
NKTATCWSLD PDLTNILASS RSYAMLLFAW EGWHNAAGIP LKPLYEDFTA LSNEAYKQDG FTDTGAYWRS
WYNSPTFEDD LEHLYQQLEP LYLNLFHAFVR RALHRRYGDR YINLRGPIPA HLLGDMWAQS WENIYDMVVP
FPDKPNLDVT STMLQQGWNA THMFRVAEEF FTSLELSPMP PEFWEGSMLE KPADGREVVC
HASAWDFYNR KDFRIKQCTR VTMDQLSTVH HEMGHIQYYL QYKDLVSLR RGANPGFHEA IGDVLALSVS
TPEHLHKIGL LDRVNTDES DINYLLKMAL EKIAFLPGFY LVDQWRWGVF SGRTPPSRYN FDWWYLRTKY
QGICPPVTRN ETHFDAGAKF HVPNVTPYIR YFVSFVLQFQ FHEALCKEAG YEGPLHQCDI YRSTKAGAKL
RKVLQAGSSR PWQEVKDMV GLDALDAQPL LKYFQPVTQW LQEQNQNGE VLGWPEYQWH
PPLPDNYPEG IDLVTDEAEA SKFVEEYDRT SQVWNEYAE ANWNYNTNIT TETSKILLQK NMQIANHTLK
YGTQARKFDV NQLQNTTIKR IIKKVQDLER AALPAQELEE YNKILLDMET TYSVATVCHP NGSCLQLEPD
LTNVMATSRK YEDLLWAWEG WRDKAGRAIL QFYPKYVELI NQAARLNGYV DAGDSWRSMY
ETPSLEQDLE RLFQELQPLY LNLHAYVRRR LHRHYGAQHI NLEGPPIAHL LGNMWAQTWS NIYDLVVPFP
SAPSMDTTEA MLKQGWTPRR MFKEADDFFT SLGLLPVPPE FWNKSMLEKP TDGREVVCHA
SAWDFYNGKD FRIKQCTTVN LEDLVVAHHE MGHIQYFMQY KDLPVALREG ANPGFHEAIG DVLALSVSTP
KHLHSLNLLS SEGGSDEHDI NFLMKMALDK IAFIPFSYLV DQWRWRVFDG SITKENYNQE WWSRLKYQG
LCPVPRTQG DFDPGAKFHI PSSVPYIRYF VSFIIQFQFH EALCQAAGHT GPLHKCDIYQ SKEAGQRLAT
AMKLGFSRPW PEAMQLITGQ PNMSASAMLS YFKPLLDWLR TENELHGEKL GWPOYNWTPN
SARSEGLPD SGRVSFLGLD LDAQQARVEH HHHHH

Application Note

Specific activity is > 1,000 pmol/min/mg. Defined by the amount of enzyme that cleaves 1pmol of McaRPPGFSAFK(Dnp)-OH per minute at 25°C.