

# Recombinant rat ACE-2 protein

Catalog Number: ATGP4048

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

18-740aa

### UniProt No.

Q5EGZ1

### NCBI Accession No.

NP\_001012006.1

### Alternative Names

ACE2, angiotensin-converting enzyme2, Ace2, ACE-related carboxypeptidase

## PRODUCT SPECIFICATION

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### Molecular Weight

84.7 kDa (731aa)

### Concentration

0.5mg/ml (determined by absorbance at 280nm)

### Formulation

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

### Purity

> 95% by SDS-PAGE

### Endotoxin level

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

### Biological Activity

Specific activity is > 150 pmol/min/ug, and is defined as the amount of enzyme that hydrolysis 1.0 pmole of Mca-YVADAPK(Dnp)-OH per minute at pH 7.5, 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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# Recombinant rat ACE-2 protein

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## Description

ACE-2, also known as angiotensin-converting enzyme 2, is carboxypeptidase which converts angiotensin I to angiotensin 1-9, a peptide of unknown function, and angiotensin II to angiotensin 1-7, a vasodilator. It is able to hydrolyze apelin-13 and dynorphin-13 with high efficiency and may be an important regulator of heart function. Recombinant rat ACE-2, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

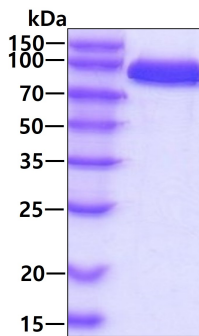
QSLIEEKAES FLNKFNQEAE DLSYQSSLAS WNYNTNITEE NAQKMNEAAA KWSAFYEEQS KIAQNFSLQE IQNATIKRQL  
KALQQSGSSA LSPDKNKQLN TILNTMSTIY STGKVCNSMN PQECFLLEPG LDEIMATSTD YNRRLWAWEG WRAEVGKQLR  
PLYEEYVVLK NEMARANNYE DYGDYWRGDY EAEGVEGYNY NRNQLIEDVE NTFKEIKPLY EQLHAYVRTK LMEVYPSYIS  
PTGCLPAHLL GDMWGRFWTN LYPLTTPFLQ KPNIDVTDAM VNQSWDAERI FKEAEKFFVS VGLPQMTPGF WTNSMLTEPG  
DDRKVVCHPT AWDLGHGDFR IKMCTKVTMD NFLTAHHEMG HIQYDMAYAK QPFLLRNGAN EGFHEAVGEI MSLSAATPKH  
LKSIGLLPSN FQEDNETEIN FLLKQALTIV GTLPFTYMLE KWRWMVFQDK IPREQWTKKW WEMKREIVGV VEPLPHDETY  
CDPASLFHVS NDYSFIRYYT RTIYQFQFQE ALCQAAKHDG PLHKCDISNS TEAGQKLLNM LSLGNSGPWT LALENVVGSR  
NMDVKPLLNY FQPLFVWLKE QNRNSTVGWS TDWSPYADQS IKVRISLKSA LGKNAYEWD NEMYLFRSSV AYAMREYFSR  
EKNQTVPFGE ADVVWSDLKP RVSFNFFVTS PKNVSDIIPR SEVEEAIRMS RGRINDIFGL NDNSLEFLGI YPTLKPPYEP  
PVT<LEHHHHH H>

## General References

Li W., et al. (2004) J. Virol. 78:11429-11433.  
Crackower M., A. et al. (2002) Nature 417:822-828.

## DATA

### SDS-PAGE



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