

ACE-2 active protein

Recombinant human ACE-2 protein

CATALOG # AAA48372	HOST HEK293	APPLICATIONS SDS-Page
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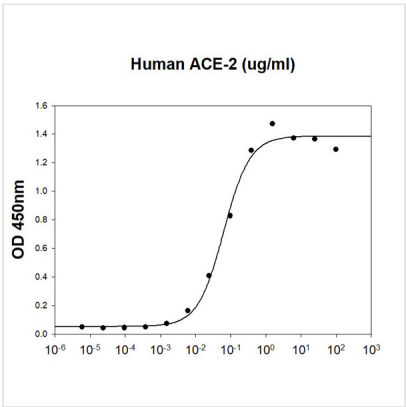
PRODUCT SYNONYMS

ACE-2; Recombinant human ACE-2 protein; Angiotensin-converting enzyme 2; ACEH; Angiotensin-converting enzyme-related carboxypeptidase; ACE-related carboxypeptidase; Metalloprotease MPROT15; ACE2; ACE-2 active protein

PRODUCT SPECIFICATIONS

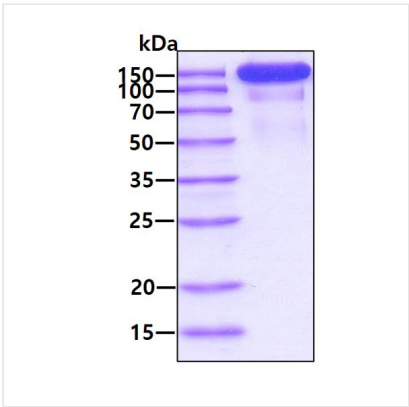
Host	HEK293
Purity/Purification	>90% by SDS-PAGE
Form/Format	Liquid. In Phosphate-Buffered Saline (pH7.4) containing 10% glycerol
Concentration	0.5mg/ml (determined by Absorbance at 280nm) (varies by lot)
Sequence Positions	18-740aa
Sequence	QSTIE EQAKTFLDKF NHEAEDLFYQ SSLASWNYNT NITEENVQNM NNAGDKWSAF LKEQSTLAQM YPLQEIQNLT VKLQLQALQQ NGSSVLSEDK SKRLNTILNT MSTIYSTGKV CNPDNPQECL LLEPGLNEIM ANSLDYNERL WAWESWRSEV GKQLRPLYEE YVVLKNEMAR ANHYEDYGDY WRGDYEVNGV DGYDYSRGQL IEDVEHTFEE IKPLYEHLHA YVRAKLMNAY PSYISPIGCL PAHLLGDMWG RFWTNLYSLT VPFGQKPNID VTDAMVDQAW DAQRIFKEAE KFFVSVGLPN MTQGFWENSM LTDPGNVQKA VCHPTAWDLG KGDFRILMCT KVTMDDFLTA HHEMGHIQYD MAYAAQPFL RANGANEGFHE AVGEIMSLSA ATPKHLKSIG LLSPDFQEDN ETEINFLKQ ALTIVGTLPF TYMLEKWRWM VFKEIPKDQ WMKKWWEMKR EIVGVVEPVP HDETYCDPAS LFHVSNDYSF IRYYTRTLQY FQFQEALCQA AKHEGPLHKC DISNSTEAGQ KLFNMLRLGK SEPWTLAEN VVGAKNMNVR PLLNYFEPLF TWLKDQNKNS FVGWSTDWSP YADQSIKVR I SLKSALGDKA YEWNDNEMYL FRSSVAYAMR QYFLKVKNQM ILFGEEDVRV ANLKPRISFN FFVTAPKNVS DIIPRTEVEK AIRMSRSRIN DAFRLNDNSL EFLGIQPTLG PPNQPPVS
Applicable Applications for ACE-2 active protein	Enzyme Activity, SDS-PAGE
Endotoxin	<1 EU per 1ug of protein (determined by LAL method)
Species	Human
Tag	hIgG-His-Tag
Predicted N-term	Asp
Bioactivity	Measured by its binding ability in a functional ELISA with SARS-CoV-2 Spike RBD. The ED50 range <= 100ng/ml. Specific activity is > 250pmol/min/ug, and is defined as the amount of enzyme that hydrolysis 1.0 pmole of Mca-YVADAPK(Dnp)-OH per minute at pH7.5, at 25 degree C.
Preparation and Storage	Can be stored at +2C to +8 degree C for 1 week. For long term storage, aliquot and store at -20C to -80 degree C. Avoid repeated freezing and thawing cycles.

IMAGES



Bioactivity

SARS-CoV-2 Spike RBD is coated at 5 ug/ml (100 ul/well) can bind Human ACE-2. The ED50 range



SDS-PAGE

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

ADDITIONAL INFORMATION

Related Product Information for ACE-2 active protein	ACE-2, also known as Angiotensin-converting enzyme 2, is an enzyme attached to the cell membranes of cells in the lungs, arteries, heart, kidney, and intestines. This enzyme lowers blood pressure by catalysing the hydrolysis of angiotensin II into angiotensin. It counters the activity of the related angiotensin-converting enzyme (ACE) by reducing the amount of angiotensin-II and increasing Ang(1-7) making it a promising drug target for treating cardiovascular diseases. ACE-2 also serves as the entry point into cells for some coronaviruses, including HCoV-NL63, SARS-CoV, and SARS-CoV-2. Recombinant human ACE-2, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques
Product Categories/Family for ACE-2 active protein	Virus; Proteins
References	Hamming I., et al, (2004) J Pathol. 203:631-637. Mohammed A.r. Chamsi-Pasha., et al, (2014) Curr Heart Fail Rep. 11:58-63.

NCBI AND UNIPROT INFORMATION

NCBI GI #	11225609
NCBI GeneID	59272
NCBI Accession #	NP_068576.1
NCBI GenBank Nucleotide #	NM_021804.2
UniProt Accession #	Q9BYF1; Q6UWP0; Q86WT0; Q9NRA7; Q9UFZ6; C7ECU1
Molecular Weight	92,463 Da
NCBI Official Full Name	angiotensin-converting enzyme 2
NCBI Official Synonym Full Names	angiotensin I converting enzyme 2
NCBI Official Symbol	ACE2
NCBI Official Synonym Symbols	ACEH
NCBI Protein Information	angiotensin-converting enzyme 2; peptidyl-dipeptidase A; metalloprotease MPROT15; ACE-related carboxypeptidase; angiotensin-converting enzyme homolog; angiotensin I converting enzyme (peptidyl-dipeptidase A) 2
UniProt Protein Name	Angiotensin-converting enzyme 2
UniProt Gene Name	ACE2

UniProt Synonym Gene Names	ACEH
UniProt Entry Name	ACE2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/hek293-active-protein/ace-2/48372>