

Human CellExp™ ACE2, Human Recombinant

rev 12/20

CATALOG NO:	P1535-10 10 µg P1535-50 50 µg
ALTERNATE NAMES:	Angiotensin-Converting Enzyme 2, ACE-Related Carboxypeptidase, Angiotensin-Converting Enzyme Homolog, ACEH, Metalloprotease MPROT15, ACE2
MOL. WT.	84 kDa (N-terminal 6x His-tag)
SOURCE:	HEK 293 Cells
PURITY:	> 95% SDS-PAGE
FORM:	Liquid
FORMULATION:	0.22 µm Filtered 20 mM Tris-HCl, 150 mM NaCl, 0.1 mM ZnCl ₂ , 10% Glycerol, pH 7.5
SPECIFIC ACTIVITY:	The specific activity is > 1 U/mg, which was assayed using BioVision's Angiotensin II Converting Enzyme (ACE2) Activity Assay Kit (Fluorometric, BioVision Catalog # K897-100).
UNIT DEFINITION:	One unit is defined as the amount of enzyme that generates 1.0 µmol of substrate per min under the assay conditions.
STORAGE CONDITIONS:	For long term storage, aliquot and store at -20 °C. Avoid repeated freeze-thaw cycles.
DESCRIPTION:	Angiotensin converting enzyme 2 (ACE2) is a receptor for SARS-CoV and SARS-CoV-2 (the virus causing coronavirus disease 2019, COVID-19). The spike protein of SARS-CoV recognizes ACE2 as its receptor during the first step in viral entry. ACE2 converts angiotensin I to angiotensin 1-9, a nine-amino acid peptide with anti-hypertrophic effects in cardiomyocytes, and angiotensin II to angiotensin 1-7, a vasodilator. It cleaves other biological peptides, such as apelins, casomorphins and dynorphin A with high efficiency. Antibodies targeting ACE2 and spike protein receptor binding domain (RBD) interaction could be used to block SARS-CoV-2 viral entry thereby suppress virus replication.
AMINO ACID SEQUENCE:	aa Gln 18 - Ser 740

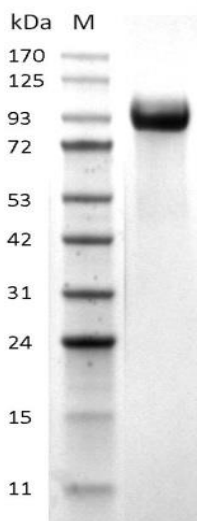


Fig. A. SDS-PAGE (4-20%) of Recombinant ACE2: Recombinant protein loaded was under reducing conditions and stained with Coomassie Blue.

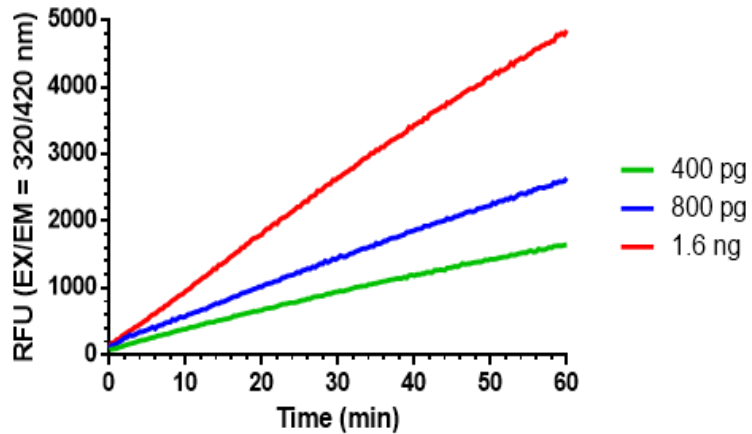


Fig. B. Specific activity: The specific activity is > 1 U/mg, which was assayed using BioVision's Angiotensin II Converting Enzyme (ACE2) Activity Assay Kit (Fluorometric, BioVision Catalog # K897-100).

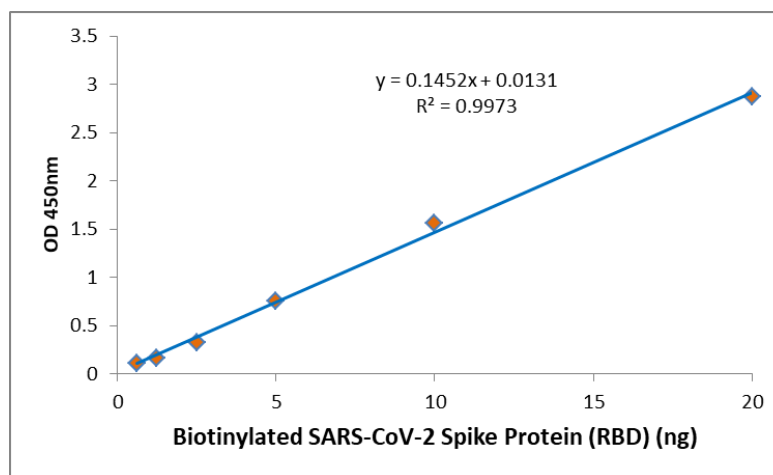


Fig.C. Biological activity: Recombinant Human ACE-2 (50 ng) binds biotinylated Recombinant SARS-CoV-2 Spike Protein (RBD) in a functional ELISA.

RELATED PRODUCTS:

- ACE2 (Human) ELISA Kit (E4528)
- Angiotensin II Converting Enzyme (ACE2) Activity Assay Kit (Fluorometric) (K897)
- Angiotensin III (Ang III)(Human) ELISA Kit (E4536)
- Angiotensin II Converting Enzyme (ACE2) Inhibitor Screening Kit (K310)
- ACE Antibody (CT) (6703)
- Human CellExp™ SARS-CoV-2 Spike Protein (RBD 310-568), Recombinant (P1543)
- Human CellExp™ SARS-CoV-2 Spike Protein (RBD; 331-524), Recombinant (P1544)

FOR RESEARCH USE ONLY! Not to be used on humans.