

## Recombinant Human ACE-2 (C-His) Catalog No: BP042 (C419)

**Description** Recombinant Human Angiotensin-Converting Enzyme 2 is produced by our Mammalian expression

system and the target gene encoding Gln18-Ser740 is expressed with a polyhistidine tag at the C-

terminus

**HEK293** Source

Angiotensin-Converting Enzyme 2; ACE-Related Carboxypeptidase; Angiotensin-Converting Alternative name

Enzyme Homolog; ACEH; Metalloprotease MPROT15; ACE2

Q9BYF1 Accession No. **Predicted** 85kDa

**Apparent Molecular Weight** 

**Molecular Weight** 

103kDa, reducing condition

**Quality Control** 

Purity: greater than 95% as determined by reducing SDS-PAGE and SEC-HPLC

Endotoxin: less than 0.1 EU/µg as determined by TAL test.

**Formulation** 

Lyophilized from a sterile PBS, pH7.4 solution

Reconstitution

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Shipping** 

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

**Storage** 

Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples

are stable at < -20°C for 3 months.

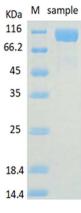
Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

**Background** 

Angiotensin-Converting Enzyme 2 (ACE-2) is an integral membrane protein and a zinc metalloprotease of the ACE family, the ACE family includes somatic and germinal ACE.

ACE-2 cleaves angiotensin I and II as a carboxypeptidase and converts angiotensin I to angiotensin 1-9, and angiotensin II to angiotensin 1-7. ACE-2 is also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency. ACE-2 can be high expressed in testis, kidney and heart, in colon, small intestine and ovary at moderate levels. Captopril and lisinopril as the classical ACE inhibitor do not inhibit ACE-2 activity. ACE-2 may play an important role in regulating the heart function.

**SDS-PAGE** 



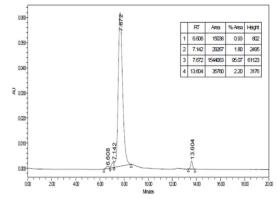
Reducing condition



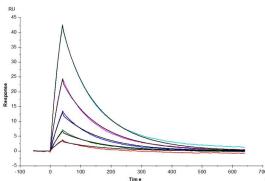


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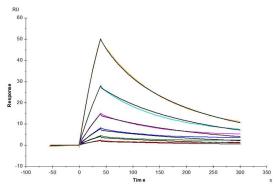
## **SEC-HPLC**



## **Bioactivity (SPR)**



Human ACE-2, His tag (Cat# BP042) captured on chip can bind to SARS-CoV-2 Spike Protein RBD-His (Cat# BP036) with an affinity constant (KD) value of 17.6nM. (Biacore T200)



Human ACE-2, His tag (Cat# BP042) captured on chip can bind to SARS-CoV-2 Spike Protein RBD, tag free (Cat# BP038) with an affinity constant (KD) value of 9.19nM. (Biacore T200)

