

**Synonym**

ACE-2,ACEH,ACE2

**Source**

Human ACE2, His Tag (AC2-H52H4) is expressed from human 293 cells (HEK293).

**Molecular Characterization**

This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 85.5 kDa. The protein migrates as 90-115 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Supplied as 0.2 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Shipping**

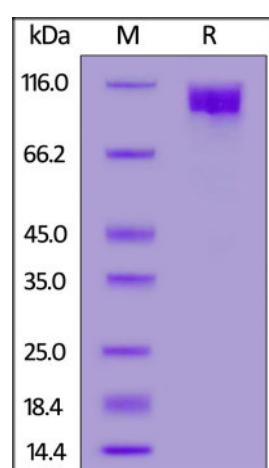
*This product is supplied and shipped with dry ice, please inquire the shipping cost.*

**Storage**

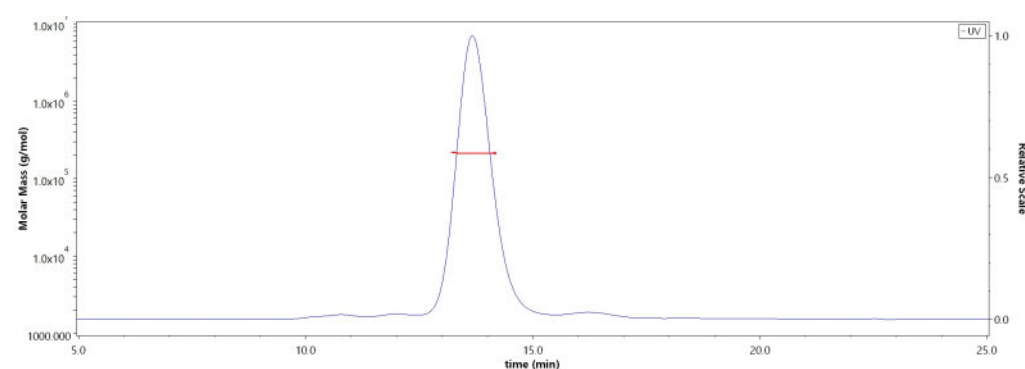
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- The product **MUST** be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

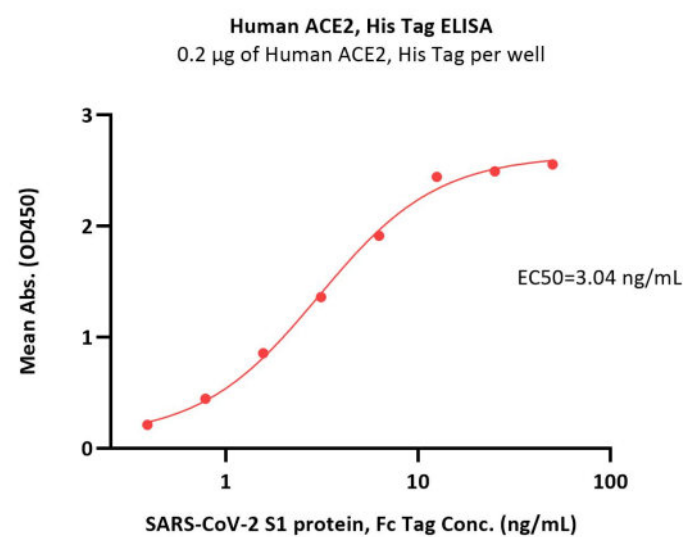
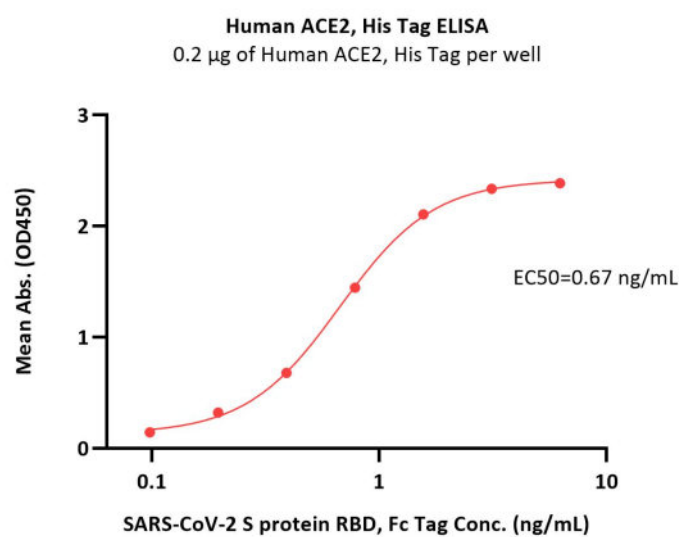
**SDS-PAGE**

Human ACE2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA****SEC-MALS**

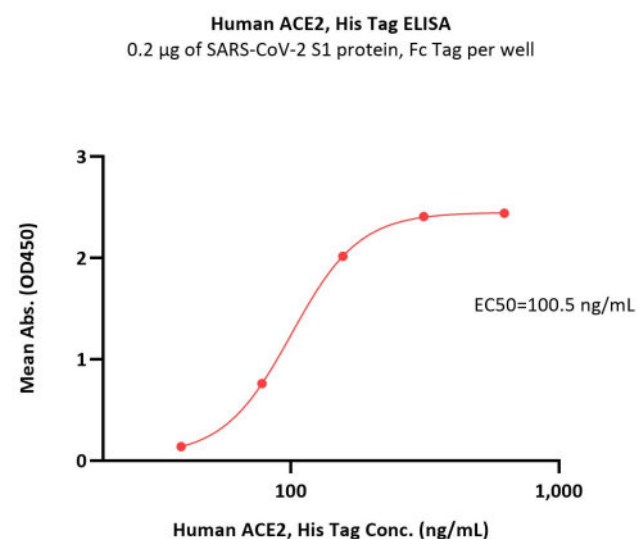
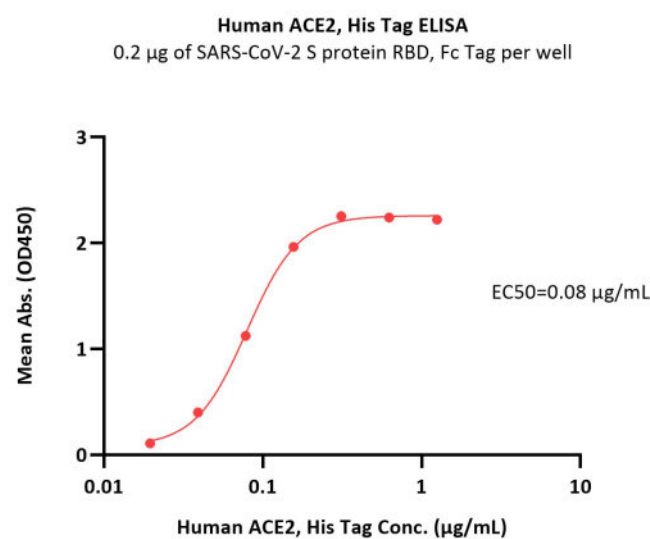
The purity of Human ACE2, His Tag (Cat. No. AC2-H52H4) is more than 85% and the molecular weight of this protein is around 170-220 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human ACE2, His Tag (Cat. No. AC2-H52H4) at 2 µg/mL (100 µL/well) can bind SARS-CoV-2 S protein RBD, Fc Tag (Cat. No. SPD-C5255) with a linear range of 0.1-0.8 ng/mL (QC tested).

Immobilized Human ACE2, His Tag (Cat. No. AC2-H52H4) at 2 µg/mL (100 µL/well) can bind SARS-CoV-2 S1 protein, Fc Tag (Cat. No. S1N-C5255) with a linear range of 0.4-6 ng/mL (Routinely tested).



Immobilized SARS-CoV-2 S protein RBD, Fc Tag (Cat. No. SPD-C5255) at 2 µg/mL (100 µL/well) can bind Human ACE2, His Tag (Cat. No. AC2-H52H4) with a linear range of 0.02-0.16 µg/mL (Routinely tested).

Immobilized SARS-CoV-2 S1 protein, Fc Tag (Cat. No. S1N-C5255) at 2 µg/mL (100 µL/well) can bind Human ACE2, His Tag (Cat. No. AC2-H52H4) with a linear range of 39-156 ng/mL (Routinely tested).

## Background

Angiotensin-converting enzyme 2 (ACE2) is also known as ACEH (ACE homolog), is an integral membrane protein with considerable homologous to ACE, which belongs to the peptidase M2 family. ACE2 is an exopeptidase that catalyses the conversion of angiotensin I to the nonapeptide angiotensin, or the conversion of angiotensin II to angiotensin 1-7. ACE2 may be an important regulator of heart function. In case of human coronaviruses SARS and HCoV-NL63 infections, ACE-2 serve as functional receptor for the spike glycoprotein of both coronaviruses. ACE2 is activated by chloride and fluoride, but not bromide and Inhibited by MLN-4760, cFP\_Leu, and EDTA, but not by the ACE inhibitors lisinopril, captopril and enalaprilat. ACE2 is active from pH 6 to 9, and the optimum pH is 6.5 in the presence of 1 M NaCl.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.