

#### Synonym

ACE-2,ACEH,ACE2

#### Source

HRP-Human ACE2, Fc Tag (AC2-HR2H0) is expressed from human 293 cells (HEK293). It contains AA Gln 18 - Ser 740 (Accession # Q9BYF1-1). Predicted N-terminus: Gln 18

#### **Molecular Characterization**

ACE2(Gln 18 - Ser 740) Fc(Pro 100 - Lys 330)
Q9BYF1-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 110.0 kDa.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

## **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.3 . Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### **Storage**

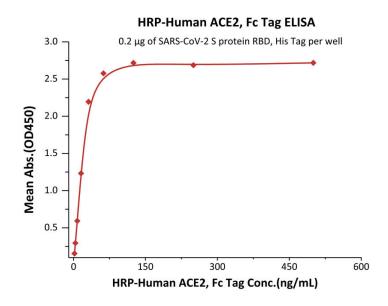
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **Bioactivity-ELISA**



## Detection of HRP-Human ACE2, Fc Tag titer by Indirect-ELISA Assay.

Immobilized SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H1) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind HRP-Human ACE2, Fc Tag (Cat. No. AC2-HR2H0) with a linear range of 2.0-31.2ng/mL (QC 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-

# HRP-Human ACE2 / ACEH Protein, Fc Tag





4760, cFP\_Leu, and EDTA, but not by the ACE inhibitors linosipril, 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.