## Biotinylated Human ACE2 / ACEH Protein, Fc,Avitag™

Catalog # AMS.AC2-H82F9



### Synonym

ACE-2,ACEH,ACE2

#### Source

Biotinylated Human ACE2, Fc, Avitag (AMS.AC2-H82F9) is expressed from human293 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)	Avi
Q9BYF1-1	P01857	

This protein carries a human IgG1 Fc tag at the C-terminus, followed by a Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 111.7 kDa. The protein migrates as 125-150 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Biotinylation

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Delivered as bulk protein in a  $0.2~\mu m$  filtered solution of 50~mM Tris, 150~mM NaCl, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

## **Storage**

Please avoid repeated freeze-thaw cycles.

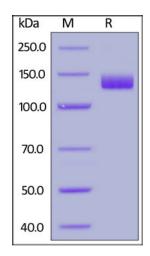
This product is stable after storage at:

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

## Shipping

This product is supplied as sterile liquid solution and shipped frozen with dry ice, please inquire the shipping cost.

## SDS-PAGE



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

## **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 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.

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## References

- (1) <u>Turner AJ., et al., 2002, Can. J. Physiol. Pharmacol. 80 (4): 346–53.</u>
- (2) Katovich MJ., et al., 2005, Exp. Physiol. 90 (3): 299–305.
- (3) <u>Donoghue M., et al., 2000, Circ. Res. 87:E1-E9.</u>
- (4) <u>Tipnis S.R., et al., 2000, J. Biol. Chem. 275:33238-33243.</u>
- (5) Vickers C., et al., 2002, J. Biol. Chem. 277:14838-14843.