

Datasheet for ABIN6952458

**ACE2 Protein (Fc Tag,AVI tag,Biotin)**[2 Images](#)[2 Publications](#)[Go to Product page](#)

## Overview

Quantity:	200 µg
Target:	ACE2
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACE2 protein is labelled with Fc Tag,AVI tag,Biotin.

## Product Details

Sequence:	AA 18-740
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	Biotinylated Human ACE2, Fc,Avitag is expressed from human 293 cells (HEK293). It contains AA Gln 18 - Ser 740 (Accession # Q9BYF1-1). Predicted N-terminus: Gln 18 This protein carries a human IgG1 Fc tag at the C-terminus, followed by a Avi tag (Avitag™).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

## Target Details

Target:	ACE2
Alternative Name:	ACE2 ( <a href="#">ACE2 Products</a> )
Background:	Angiotensin-converting enzyme 2 (ACE2) is also known as ACEH (ACE homolog), is an integral

## Target Details

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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.

Molecular Weight: 111.7 kDa

NCBI Accession: [NP\\_068576](#)

Pathways: [ACE Inhibitor Pathway](#), [Peptide Hormone Metabolism](#), [Regulation of Systemic Arterial Blood Pressure by Hormones](#), [Feeding Behaviour](#)

## Application Details

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Application Notes: The protein has a calculated MW of 111.7 kDa. The protein migrates as kDa under reducing (R) condition due to glycosylation.

Comment: Ready-to-use Avitag™ biotinylated protein:  
The product is exclusively produced using the Avitag™ technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: 50 mM Tris, 150 mM NaCl, pH 7.5

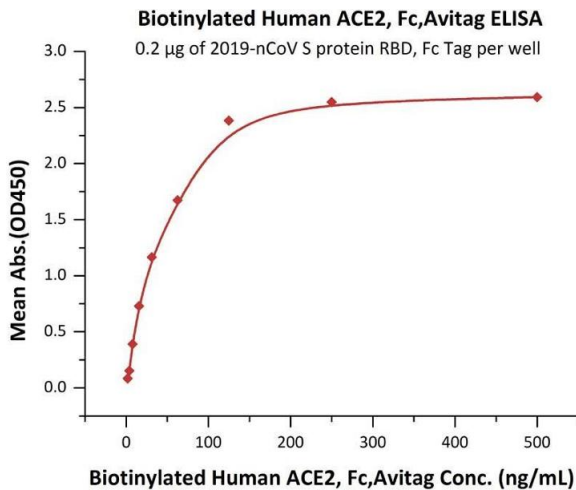
## Handling

Handling Advice:	Please avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	The product MUST be stored at -70°C or lower upon receipt -70°C for 3 months under sterile conditions.

## Publications

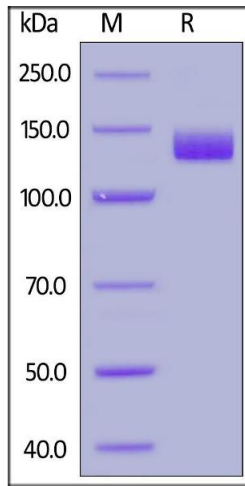
Product cited in:	Dogan, Kozhaya, Placek, Gunter, Yigit, Hardy, Plassmeyer, Coatney, Lillard, Bukhari, Kleinberg, Hayes, Ardit, Klapper, Merin, Liang, Gupta, Alpan, Unutmaz: "SARS-CoV-2 specific antibody and neutralization assays reveal the wide range of the humoral immune response to virus." in: <b>Communications biology</b> , Vol. 4, Issue 1, pp. 129, (2021) ( <a href="#">PubMed</a> ).
	Chouchane, Grivel, Farag, Pavlovski, Maacha, Sathappan, Al-Romaihi, Abujaqel, Ata, Ismail Chouchane, Remadi, Halabi, Rafii, Al-Thani, Marr, Subramanian, Shan: "Dromedary camels as a natural source of neutralizing nanobodies against SARS-CoV-2." in: <b>JCI insight</b> , (2021) ( <a href="#">PubMed</a> ).

## Images



### ELISA

**Image 1.** Immobilized 2019-nCoV S protein RBD, Fc Tag (ABIN6952455) at 2 µg/mL (100 µL/well) can bind Biotinylated Human ACE2, Fc,Avitag ( ABIN6952458) with a linear range of 2-63 ng/mL (QC tested).



### SDS-PAGE

**Image 2.** 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%.