

Datasheet for ABIN6952431

ACE2 Protein (His tag,AVI tag,Biotin)[Go to Product page](#)**7** Images**1** Publication

Overview

Quantity:	200 µg
Target:	ACE2
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACE2 protein is labelled with His tag,AVI tag,Biotin.
Application:	SDS-PAGE (SDS), Functional Studies (Func)

Product Details

Brand:	MABSol®,PrecisionAvi
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:	This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 87.2 kDa. The protein migrates as 95-125 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	ACE2
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Target Details

Alternative Name:	ACE2 (ACE2 Products)
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.
Molecular Weight:	87.2 kDa
NCBI Accession:	NP_068576
Pathways:	ACE Inhibitor Pathway , Peptide Hormone Metabolism , Regulation of Systemic Arterial Blood Pressure by Hormones , Feeding Behaviour

Application Details

Comment:	<p>Ready-to-use AvitagTM biotinylated protein:</p> <p>The product is exclusively produced using the AvitagTM 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.</p> <p>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.</p>
Restrictions:	For Research Use only

Handling

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

Handling

Handling Advice: Please avoid repeated freeze-thaw cycles.

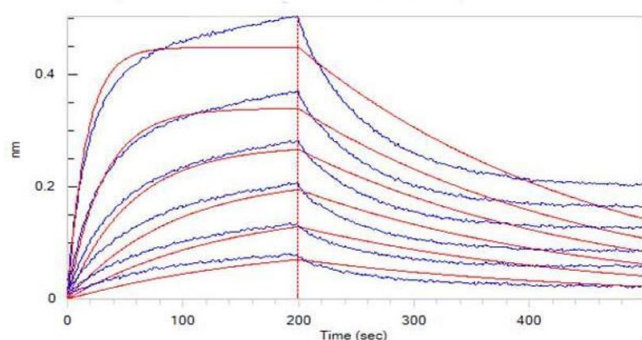
Storage: -20 °C

Storage Comment: -20°C

Publications

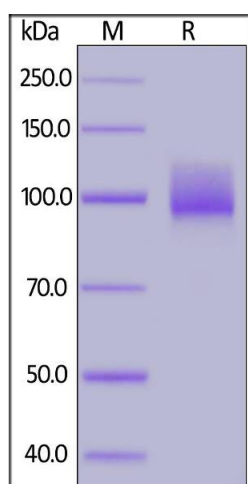
Product cited in: Bell, Powell, Rodriguez, Cochran, Kim: "Neutralizing antibodies targeting the SARS-CoV-2 receptor binding domain isolated from a naïve human antibody library." in: **Protein science : a publication of the Protein Society**, Vol. 30, Issue 4, pp. 716-727, (2021) ([PubMed](#)).

Images



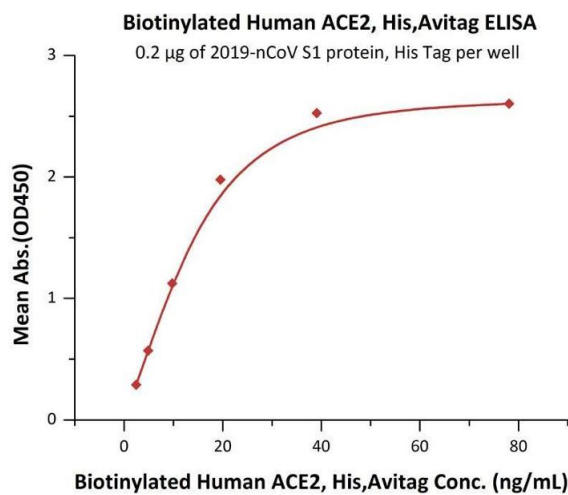
Bio-Layer Interferometry

Image 1. Loaded Biotinylated Human ACE2, His,Avitag (ABI6952431) on SA Biosensor, can bind 2019-nCoV S1 protein, His Tag (ABIN6952427) with an affinity constant of 33.3 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



SDS-PAGE

Image 2. Biotinylated Human ACE2, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.



ELISA

Image 3. Immobilized 2019-nCoV S1 protein, His Tag (ABIN6952427) at 2 µg/mL (100 µL/well) can bind Biotinylated Human ACE2, His,Avitag (ABI6952431) with a linear range of 2-20 ng/mL (QC tested).

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN6952431.