

Recombinant Cynomolgus ACE2 protein, His-tagged

Cat. No. ACE2-108C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus ACE2 protein (Gln18-Thr741), fused to His-tag at the N-terminus, was expressed in HEK293.
Species	Cynomolgus
Source	HEK293
ProteinLength	Gln18-Thr741
Description	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.
Predicted N Terminal	His
Form	Delivered as bulk protein in a 0.2 µm filtered solution of 50 mM Tris, 150 mM NaCl, Arginine, pH7.5 with glycerol as protectant.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	The protein has a calculated MW of 85.7 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.
Storage	Please avoid repeated freeze-thaw cycles. This product is stable after storage at: The product MUST be stored at -70 centigrade or lower upon receipt; -70 centigrade for 3 months under sterile conditions.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.
Shipping	This product is supplied as sterile liquid solution and shipped frozen with dry ice.

GENE INFORMATION

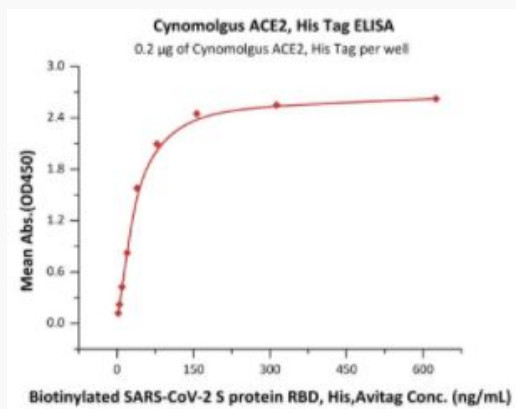
Gene Name	ACE2
Official Symbol	ACE2
Synonyms	angiotensin I converting enzyme 2
Gene ID	102130864
mRNA Refseq	XM_005593037.2
Protein Refseq	XP_005593094.1

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

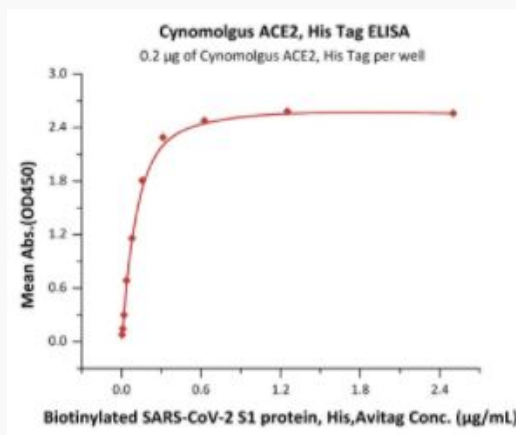
 45-1 Ramsey Road, Shirley, NY 11967, USA

Bioactivity-ELISA of ACE2-108C



Immobilized Cynomolgus ACE2, His Tag at 2 µg/mL (100 µL/well) can bind Biotinylated SARS-CoV-2 S protein RBD, His,Avitag with a linear range of 2-78 ng/mL (QC tested).

Bioactivity-ELISA of ACE2-108C



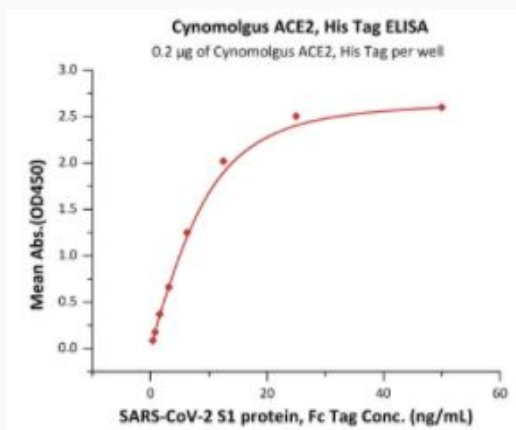
Immobilized Cynomolgus ACE2, His Tag at 2 µg/mL (100 µL/well) can bind Biotinylated COVID-19 S1 protein, His,Avitag with a linear range of 0.005-0.313 µg/mL (Routinely tested).

Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

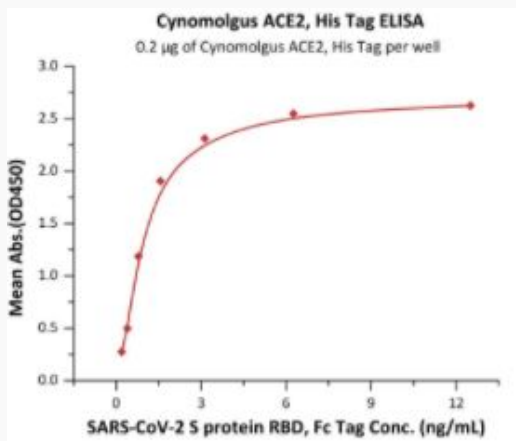
45-1 Ramsey Road, Shirley, NY 11967, USA

Bioactivity-ELISA of ACE2-108C



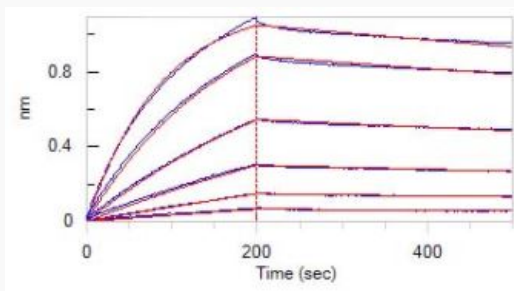
Immobilized Cynomolgus ACE2, His Tag at 2 µg/mL (100 µL/well) can bind COVID-19 S1 protein, Fc Tag with a linear range of 0.4-13 ng/mL (Routinely tested).

Bioactivity-ELISA of ACE2-108C



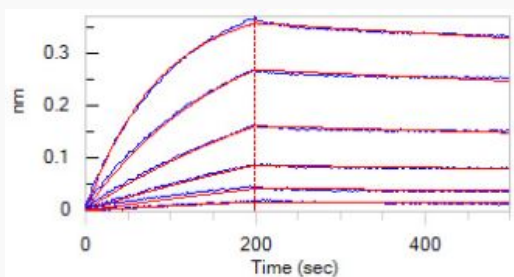
Immobilized Cynomolgus ACE2, His Tag at 2 µg/mL (100 µL/well) can bind COVID-19 S protein RBD, Fc Tag with a linear range of 0.2-2 ng/mL (Routinely tested).

Bioactivity-BLI of ACE2-108C



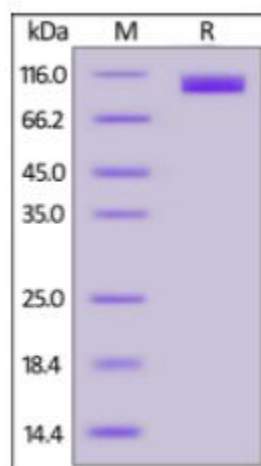
Loaded COVID-19 S protein RBD, Fc Tag on Protein A Biosensor, can bind Cynomolgus ACE2, His Tag with an affinity constant of 4.32 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Bioactivity-BLI of ACE2-108C



Loaded COVID-19 S1 protein, Mouse IgG2a Fc Tag on Protein A Biosensor, can bind Cynomolgus ACE2, His Tag with an affinity constant of 3.06 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

SDS-PAGE of ACE2- 108C



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