

### **Synonym**

ACE-2,ACEH,ACE2

#### Source

Mink ACE2, His Tag(AC2-M52H3) is expressed from human 293 cells (HEK293). It contains AA Gln 18 - Thr 740 (Accession # QPL12211.1). Predicted N-terminus: Gln 18

### **Molecular Characterization**

# ACE2(Gln 18 - Thr 740) QPL12211.1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 86.3 kDa. The protein migrates as 95-105 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

### **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in 50 mM Tris, 150 mM Nacl, pH7.5 with trehalose as protectant.

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.

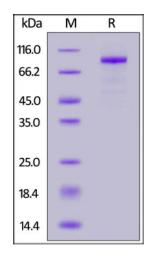
### **Storage**

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

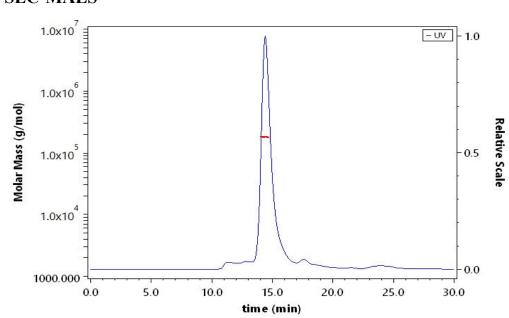
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



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

# **SEC-MALS**



The purity of Mink ACE2, His Tag (Cat. No. AC2-M52H3) is more than 85% and the molecular weight of this protein is around 175-195 kDa verified by SEC-MALS.

<u>Report</u>

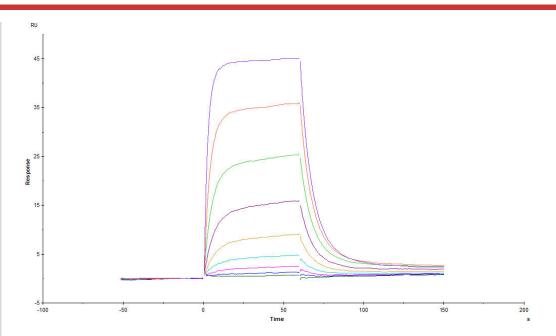
# **Bioactivity-SPR**



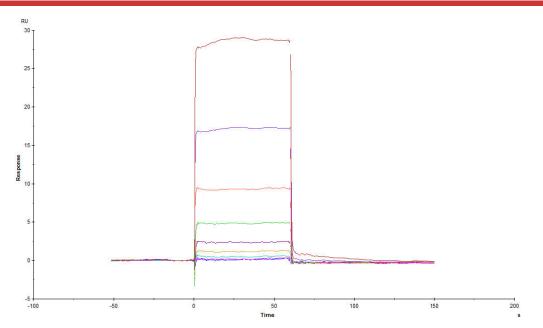
# Mink ACE2 / ACEH Protein, His Tag (MALS & SPR verified)

Catalog # AC2-M52H3





Mink ACE2, His Tag (Cat. No. AC2-M52H3) immobilized on CM5 Chip can bind SARS-CoV-2 S protein RBD (Y453F), His Tag with an affinity constant of 0.178 μM as determined in a SPR assay (Biacore T200) (QC tested).



Mink ACE2, His Tag (Cat. No. AC2-M52H3) immobilized on CM5 Chip can bind SARS-CoV-2 S protein RBD, His Tag (Cat. No. SPD-C52H3) with an affinity constant of  $8.34~\mu M$  as determined in a SPR assay (Biacore T200) (Routinely 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-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.