

## PRODUCT DATASHEET

### ACE2 (18-615), Human Recombinant (CHO cells)

**Cat. No.:** RP1791121050

**Type:** Recombinant protein

**Size:** 0.01 mg

**Source:** Chinese Hamster Ovary Cells (CHO)

**Species:** Human

#### Description

The CHO derived ACE2 Human recombinant protein contains the extracellular domain amino acids 18- 615 fused to Fc tag at C-terminal. ACE2 Protein binds to SARS Coronavirus-2 [ CoV-2019 ] Spike receptor binding domain.

#### Introduction to the molecule

ACE-2 (Angiotensin converting enzyme 2) an enzyme bound to cell membranes in various organs such as intestines arteries , lungs, heart & kidney. ACE2 an entry receptor of SARS coronaviruses as well as SARS-CoV-2,.The coronavirus spike (S) glycoprotein is a class I viral fusion antigen located on the external envelope of the virion that takes part in a critical part in viral infection by identifying host cell receptors and facilitating fusion of the viral and cellular membranes. 2 main domains in coronavirus S1 have been recognized, the N-terminal domain and C-terminal domain. One or the other and/or both S1 domains function as a receptor-binding domain. SARS-CoV + MERS-CoV equally use C-domain to attach their receptors.ACE2 is a type I transmembrane antigen with an extracellular N-terminal domain having the catalytic site and an intracellular C-terminal tail. ACE2 obtains a signal peptide, a transmembrane domain, and a single metalloproteinase active site containing an HEXXH zinc-binding domain. ACE-2 plays a role as a mono-carboxypeptidase which degrades Ang I to produce the nonapeptide Ang 1–9 and Ang II to create the heptapeptide Ang 1–7.

#### Purity

Greater than 95.0% as determined by:SDS-PAGE.

#### Biological activity

ACE2 activity was measured by its binding ability in a functional ELISA.

The immobilized Recombinant Human ACE2 protein binds to SARS CoV2 Spike protein Receptor Binding Domain at 2ug per ml.

#### Formulation:

ACE2 Human protein solution is supplied in 50mM Tris-HCl, pH7.5, and 90mM glycine.

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### **Shipping**

On frozen gel ice packs. Upon receipt, store the product at the temperature recommended below.

### **Storage, Stability/Shelf Life**

Store at  $-20^{\circ}\text{C}$

### **Applications**

COVID-19

### **Note**

BioVendor's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

