

PRODUCT DATASHEET

ACE2 (19-740), Human Recombinant (CHO cells)

Cat. No.: RP1791122050

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 19-740 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.

Shipping

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

Storage, Stability/Shelf Life

Store at -20°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.

