

32-6630: ACE2 (18-615) Human

Application : Functional Assay

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 I¹⁻⁹ and Ang II to create the heptapeptide Ang I¹⁻⁷.

Alternative Name :

Description

Source: CHO Cells

Sterile Filtered clear solution.

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The CHO derived ACE2 Human recombinant protein contains the extracellular domain amino acids 18- 615 fused to Fc tag at C-terminal and has a molecular weight of ~130 kDa. ACE2 Protein binds to SARS Coronavirus-2 [CoV-2019] Spike receptor binding domain.

Product Info

Amount : 1 µg / 5 µg

Purification : Protein is >95% pure as determined SDS-PAGE.

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

Storage condition : ACE-2 Human Recombinant Protein is shipped on ice packs. Upon arrival, Store at -20°C.

Application Note

ACE2 activity was measured by its binding ability in a functional ELISA. The immobilized Recombinant Human ACE2 protein binds to SARS CoV2 Spike protein's Receptor Binding Domain at 2ug per ml.