

## 32-6634: ACE2 (18-740) Human, Biotin

**Application :** Functional Assay

**Alternative Name :**

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.

### Description

Source: HEK293 Cells

Sterile Filtered clear solution.

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The HEK293 derived ACE2 Human recombinant biotinylated protein contains the amino acids Gln 18-Ser 740 fused to His-AVI tag at C-terminal having a predicted Mw of 87.2 kDa ( migrates 95-125 kDa under reducing conditions on sds-page due to glycosilation). ACE2 Protein binds to SARS Coronavirus-2 [ CoV-2019 ] Spike receptor binding domain.

### Product Info

**Amount :** 1 µg / 5 µg

**Purification :** ACE-2 Protein is >90% pure as determined SDS-PAGE.

**Content :** ACE2 Human protein solution is supplied in 50mM Tris, pH7.5, 150mM NaCl and 20% glycerol.

**Storage condition :** ACE-2 Human Recombinant Protein is shipped on ice packs. Upon arrival, Store at -20°C. The addition of 0.1% albmim is highly recommended for long term storage use.

### 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 Receptor Binding Domain at 2ug per ml.