ACTIVE BIOSCIENCE
PROTEINS · CELLS · ANTIBODIES

Human ACE2 (glycosylated, HEK, Fc-Tag)

Human Angiotensin Converting Enzyme 2 (a.a. 18-740), recombinant

Synonyms: Human Angiotensin Converting Enzyme 2 (a.a. 18-740), recombinant

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
50 µg	4577.955.050		
150 µg	4577.955.150		
250 µg	4577.955.250		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant Human ACE2 is a glycosylated Enzyme derived from HEK cells consisting of Amino Acids 18-740. It is fused to a Fc-Tag at the C-terminus. ACE2 Protein binds to SARS Coronavirus-2 (nCoV-2019) Spike receptor binding domain. It is an entry receptor of SARS coronaviruses as well as SARS-CoV-2. ACE2 is 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 (Angiotensin converting enzyme 2) an enzyme bound to cell membranes in various organs such as intestines arteries, lungs, heart & kidney. 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.

- **Biological Activity** 2 µg/ml, see below
- **Source** HEK
- **Purity** ≥ 95% (SDS-PAGE)
- **Endotoxin level** ≤ 0.1ng/µg (≤ 1EU/µg)
- **Stabilizer** Glycerol
- **Buffer** Tris-HCl (50 mM, pH 7.5), NaCl (150 mM)*
- **Physical state** Sterile filtered, liquid

Biological Activity

At 2µg/ml immobilized recombinant human ACE2 binds to SARS-CoV-2 Spike Protein Receptor Binding Domain in a functional ELISA.

Stability

The protein is stable for at least 2 weeks at 0°C - 4°C, and therefore can be shipped on ice packs. Upon arrival it should be stored at -20 °C. **Please avoid repeated freeze-thaw cycles**.

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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