

Anti-ACE2 [h166D4] Bulk Size Ab03704-13.0-BT

Isotype and Format: Human IgG4, Kappa

Clone Number: h166D4

Alternative Name(s) of Target: Angiotensin-converting enzyme 2; Angiotensin-converting enzyme homolog; ACEH; Angiotensin-converting enzyme-related carboxypeptidase; ACE-related carboxypeptidase; Metalloprotease MPROT15; 166D4

UniProt Accession Number of Target Protein: Q9BYF1

Published Application(s): inhibit, ELISA

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing BALB/c mice with human ACE2 protein emulsified with complete Freund's adjuvant. The humanized version of the antibody was generated by grafting CDRs onto human framework regions.

Specificity: This antibody binds the extracellular domain of the human ACE2 protein. Angiotensin-converting enzyme 2 (ACE2) is a carboxypeptidase enzyme which catalyzes the cleavage of angiotensin I to angiotensin 1-9 and angiotensin II into the vasodilator angiotensin 1-7. This enzyme is a transmembrane protein found on the surface of arteries, heart, kidneys, testis and epithelia of the lung and small intestine. The protein acts as a receptor for spike protein of human coronaviruses SARS-CoV and SARS-CoV-2/2019-nCoV (COVID-19), as well as human coronavirus NL63/HCoV-NL63 and plays a role in virus entry into target cells. Some strategies to treat COVID-19 include blockade of ACE2 receptor and delivery of excess soluble form of ACE2.

Application Notes: The binding characterization of this antibody was done using ELISA. The antibody was reported to bind human ACE2 with a binding affinity of 6.57×10^{-9} M. This antibody can completely block the binding of SARS-CoV-2 RBD to hACE2 and thereby inhibit the infection in host. This antibody can also inhibit the infection of Vero E6 cells with SARS-CoV-2 live virus with high activity, and its IC₅₀ was 0.22 µg/mL (CN113698487).

Antibody First Published in: [PMID:](#)

Note on publication:

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In:

PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.