

Product Data Sheet

ACE2 Protein, Cynomolgus (HEK293, His-Avi)

Cat. No.:	HY-P78233
Synonyms:	ACE-2; ACEH; ACE2
Species:	Cynomolgus
Source:	HEK293
Accession:	A0A2K5X283 (Q18-V739)
Gene ID:	102130864
Molecular Weight:	95-110 kDa

PROPERTIES	
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Biological Activity	Immobilized Cynomolgus ACE2, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for SARS-COV-2 Spike RBD, hFc Tag with the EC ₅₀ of 8.9ng/ml determined by ELISA.
Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background

Angiotensin-converting enzyme 2 (ACE2), an indispensable counter-regulatory carboxypeptidase within the reninangiotensin hormone system, plays a pivotal role in maintaining cardiovascular homeostasis by intricately regulating blood volume and systemic vascular resistance. Through its enzymatic activity, ACE2 converts angiotensin I to angiotensin 1-9 and angiotensin II to angiotensin 1-7, exerting anti-hypertrophic effects in cardiomyocytes and acting as a vasodilator with antiproliferative properties. Beyond its central role in the renin-angiotensin system, ACE2 exhibits broad enzymatic activity, cleaving various vasoactive peptides such as neurotensin, kinetensin, and des-Arg bradykinin. Moreover, ACE2 is proficient in cleaving other biological peptides, including apelins, casomorphins, and dynorphin A. Notably, ACE2's C-terminus, homologous to collectrin, orchestrates the trafficking of the neutral amino acid transporter SL6A19 to the gut epithelial cell membrane, thereby regulating its surface expression and catalytic activity. Importantly, ACE2 also serves as a receptor for human coronaviruses SARS-CoV, SARS-CoV-2, and HCoV-NL63, implicating it in microbial infection pathways^{[1][2][3][4]}.

Caution: Product has not been fully validated for medical applications. For research use only.

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