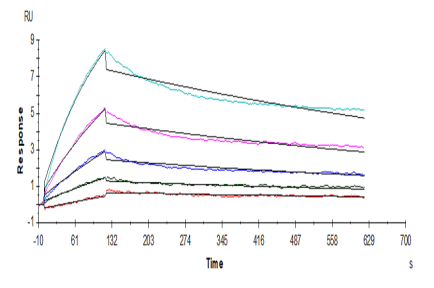
Bioactive HuPro®

ACE2 (Human) Recombinant Protein

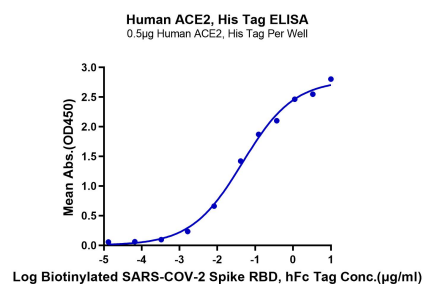
Catalog # P10023 Size 100 ug

Applications



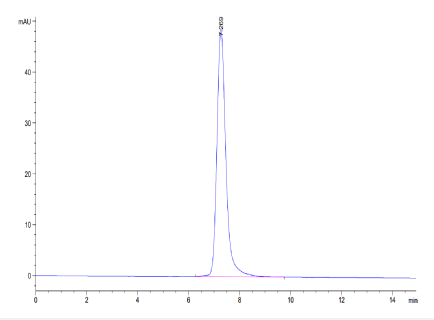
Surface Plasmon Resonance

SARS-COV-2 Spike RBD captured on Protein A chip, can bind Human ACE2, His Tag with an affinity constant of 11.9 nM as determined in a SPR assay (Biacore T200).



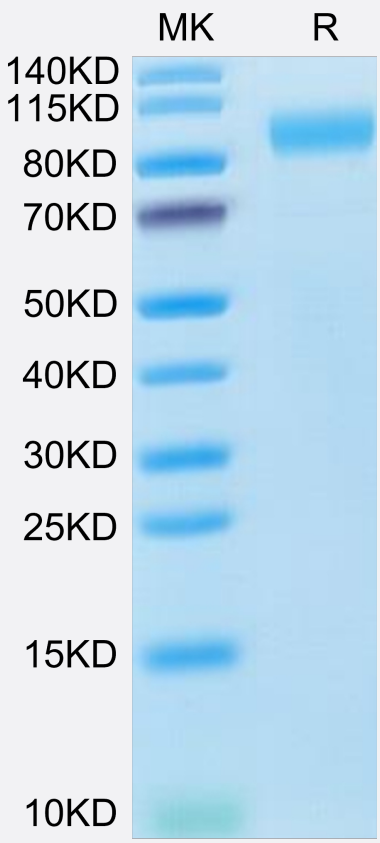
ELISA

Immobilized Human ACE2, His Tag at 5 ug/ml (100 ul/Well) on the plate. Dose response curve for Biotinylated SARS-COV-2 Spike RBD, hFc Tag with the EC_{50} of 46.2 ng/ml determined by ELISA (QC Test).



SEC-HPLC

The purity of Human ACE2 is greater than 95% as determined by SEC-HPLC



Tris-Bis PAGE

Human ACE2 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Specification

Product Description	Human ACE2 (Q9BYF1-1, Gln18-Ser740) partial recombinant protein with His tag at C-terminus expressed in HEK293 cells.
Sequence	Gln18-Ser740
Host	Human
Theoretical MW (kDa)	84.7
Form	Lyophilized
Preparation Method	Mammalian cell (HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE;> 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)

Quality Control Testing	ELISA and SEC-HPLC ELISA Immobilized Human ACE2, His Tag at 5 ug/ml (100 ul/Well) on the plate. Dose response curve for Biotinylated SARS-COV-2 Spike RBD, hFc Tag with the EC_{50} of 46.2 ng/ml determined by ELISA (QC Test). SEC-HPLC The purity of Human ACE2 is greater than 95% as determined by SEC-HPLC Tris-Bis PAGE Human ACE2 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SEC-HPLC SPR Tris-Bis PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from filtered solution in PBS, pH 7.4 (8% trehalose).
Storage Instruction	After reconstitution with deionized water to a final concentration more than 100 ug/ml, store at 4°C for 1 week. For long term storage, store at -80°C for 1 year. Aliquot to avoid repeated freezing and thawing.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Functional Study
- Surface Plasmon Resonance

  SARS-COV-2 Spike RBD captured on Protein A chip, can bind Human ACE2, His Tag with an affinity constant of 11.9 nM as determined in a SPR assay (Biacore T200).

Gene Info — ACE2

Entrez GeneID	59272
Protein Accession#	Q9BYF1-1
Gene Name	ACE2
Gene Alias	ACEH, DKFZp434A014
Gene Description	angiotensin I converting enzyme (peptidyl-dipeptidase A) 2

Omim ID	300335
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene belongs to the angiotensin-converting enzyme family of dipeptidyl carboxydipeptidases and has considerable homology to human angiotensin 1 converting enzyme. This secreted protein catalyzes the cleavage of angiotensin I into angiotensin 1-9, and angiotensin II into the vasodilator angiotensin 1-7. The organ- and cell-specific expression of this gene suggests that it may play a role in the regulation of cardiovascular and renal function, as well as fertility. In addition, the encoded protein is a functional receptor for the spike glycoprotein of the human coronaviruses SARS and HCoV-NL63. [provided by RefSeq
Other Designations	ACE-related carboxypeptidase|OTTHUMP00000022963|angiotensin I converting enzyme 2|angiotensin converting enzyme-like protein

Pathway

- Renin-angiotensin system

Disease

- Arrhythmias
- Atrial Fibrillation
- Cardiomyopathy
- Cardiovascular Diseases
- Coronary Disease
- Death
- Diabetes Mellitus
- Diabetic Nephropathies
- Disease Progression
- Edema
- Genetic Predisposition to Disease
- Hypertension
- Hypertrophy

- Hypotension
- Intracranial Aneurysm
- Malaria
- Metabolic Syndrome X
- Sarcoidosis