

Human ACE2 Overexpression 293T Stable Cell Line

Catalog No.	RM02456	Category	Cell Line
Description	Human ACE2 Overexpression 293T stable cell line is engineered from 293T cell line with Lentivirus packaging technology.		

Gene Information

Gene Symbol	ACE2	Species	Human
Gene ID	59272	Swiss Prot	Q9BYF1
Synonyms	ACEH		

Product information

Parental Cell line	HEK293T
Amount	1~5×10 ⁶ cells/vial
Growth Properties	Adherent
Complete Growth Medium	DMEM+10%(v/v)FBS+1%(v/v)P/S
Cryopreservation Medium	DMEM+40%(v/v) FBS and 10% (v/v) DMSO
Packaging	1 vial parental cell line and 1 vial ACE2 Overexpression cell line
Shipping Conditions	Dry ice
Storage Condition	Stored in liquid nitrogen for a long time less than -130℃.

Upon arrival, it should be maintained in DMEM medium with 10%(v/v) fetal bovine serum and 100U penicillin-streptomycin, at 37℃ with 5% CO₂ condition.

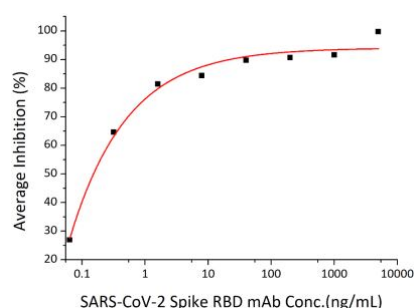
1. Thaw the vial in 37℃ water bath, and shake it to melt as soon as possible.
2. Transfer the cell suspension to a 15mL conical tube with pre-warmed 5mL complete medium and centrifuge 1000rpm for approximately 5 minutes at room temperature.
3. Remove and discard the supernatant.
4. Resuspend the cell pellet with 1mL pre-warmed complete medium and seed in 10cm dish.
5. Add 8-10mL of complete medium.
6. Incubate the culture at 37℃ incubator with 5% CO₂.
7. A subcultivation ratio of 1:2-1:4 is recommended.

Protocol

Background

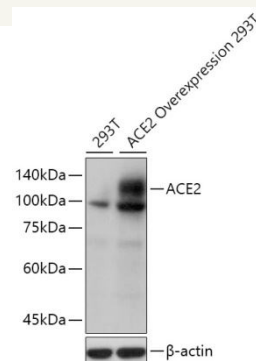
The protein encoded by this gene belongs to the angiotensin-converting enzyme family of dipeptidyl carboxydipeptidases and has considerable homology to human angiotensin 1 converting enzyme. This secreted protein catalyzes the cleavage of angiotensin I into angiotensin 1-9, and angiotensin II into the 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, Jul 2008]

Functional assay data



The virus microneutralization test was performed on Human ACE2 Overexpression 293T Stable cells infected with SARS-CoV-2 Spike Pseudovirus under treatment of serial dilutions of neutralizing antibody. The IC₅₀ is typically 0.171ng/mL.

WB data



Western blot analysis of extracts from 293T and Human ACE2 Overexpression 293T Stable cells, using ACE2 antibody (P14857) at 1:1000 dilution.