**Human ACE2 Stable Cell Line - HEK293T**

**HEK293T/ACE2**  
Lot. No. (See product label)

### CELL LINE INFORMATION

<table>
<thead>
<tr>
<th>Cat.No.</th>
<th>CSC-ACE01</th>
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| **Cell Line Description** | This cell line is constructed by transduction of human angiotensin I converting enzyme 2 (ACE2) into HEK293T cells, followed by stable cell selection. HEK293T is derived from HEK293 and is commonly used in scientific research. HEK293T-human ACE2 cell line can be used for in vitro screening and characterization of drug candidates against SARS-CoV, SARS-CoV-2 (2019-nCoV).

**Background** | ACE2 protein belongs to the angiotensin-converting enzyme family of dipeptidyl carboxydipeptidases and has considerable homology to human angiotensin 1 converting enzyme. This 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, this protein is a functional receptor for the spike glycoprotein of the human coronavirus HCoV-NL63 and the human severe acute respiratory syndrome coronaviruses, SARS-CoV and SARS-CoV-2 (COVID-19 virus).

| **Host Cell** | HEK293T |

### SAFETY AND PACKAGING

| **Mycoplasma** | Negative |
| **Format** | One frozen vial containing millions of cells |
| **Storage** | Liquid nitrogen |
| **Safety Considerations** | The following safety precautions should be observed.  
1. Use pipette aids to prevent ingestion and keep aerosols down to a minimum.  
2. No eating, drinking or smoking while handling the stable line.  
3. Wash hands after handling the stable line and before leaving the lab.  
4. Decontaminate work surface with disinfectant or 70% ethanol before and after working with stable cells.  
5. All waste should be considered hazardous.  
6. Dispose of all liquid waste after each experiment and treat with bleach.  

| **Ship** | Dry ice |
**REPRESENTATIVE DATA**

**Figure 1.** Cell morphology of HEK293T-ACE2 cell line under bright field (left) and GFP fluorescence (right).

**Figure 2.** Infection assay. 72 h after infection of 20 μL SARS-CoV-2 S glycoprotein pseudotyped GFP lentivirus into HEK293T-ACE2 cells, under bright field (left) and GFP fluorescence (right).

**Figure 3.** qPCR analysis of human ACE2 expression in HEK293T-ACE2, HEK293T is used as control.
Figure 4. Western blot analysis of human ACE2 expression in HEK293T-ACE2, HEK293T is used as control.