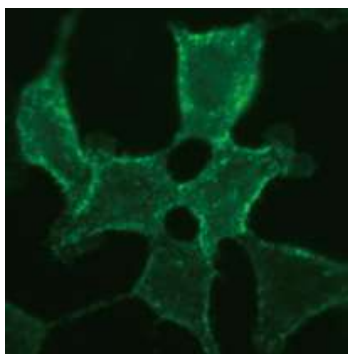


## CELL LINES

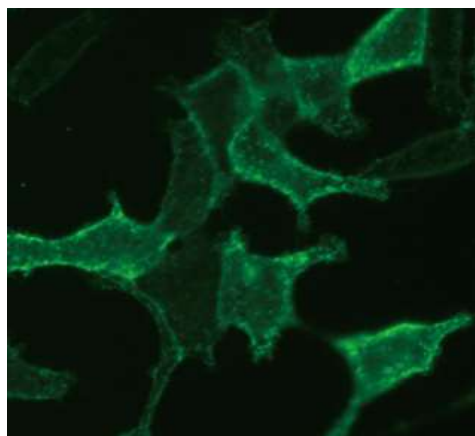
### - ACE2 HEK293 CELL LINE -



<b>Product Name:</b>	ACE2 HEK293 cell line
<b>Catalog Number:</b>	P30902
<b>Cell Line:</b>	HEK293
<b>Resistance:</b>	Hygromycin
<b>Format:</b>	>3x10 <sup>6</sup> cells in Cryopreserved vials
<b>Storage:</b>	Liquid Nitrogen

#### ACE2 HEK293 cell line

The ACE2 HEK293 cell line has been developed by stable transfection with a human Angiotensin-converting enzyme 2 (hACE2) receptor expression plasmid. hACE2 HEK293 cell line provides consistent levels of expression of human ACE2 protein in cells surface.



This cell line is intended to be used as an “in vitro” model for research studies.

#### ACE2 receptor and COVID-19

ACE2 is the main host cell receptor of novel coronavirus from human airway epithelial cells named 2019-nCoV. ACE2 is the key receptor in the entry of virus into the cell to cause the final infection.

The coronaviruses use the spike glycoprotein on the envelope to bind to their cellular ACE2 receptors through their receptor binding domain (RBD).

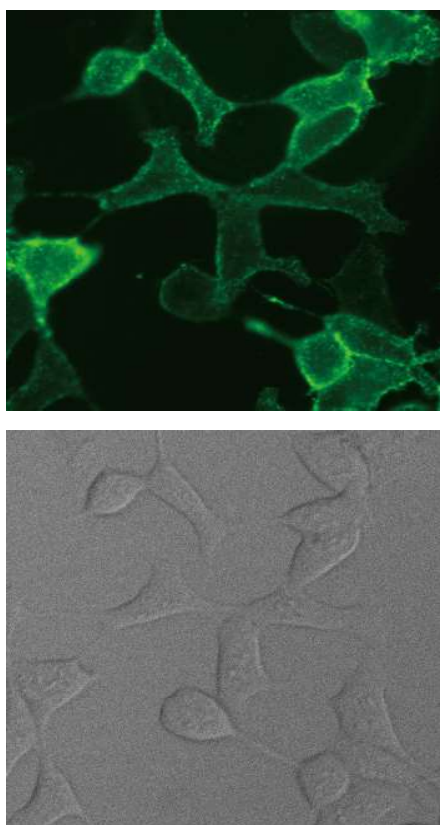
The study of the interaction between the coronavirus and the ACE2 receptor plays a crucial role in the findings of possible therapeutic strategies to treat the COVID-19 disease.

**Bibliography:** Xu, H., Zhong, L., Deng, J. et al. High expression of ACE2 receptor of 2019-nCoV on the epithelial cells of oral mucosa. *Int J Oral Sci* 12, 8 (2020). <https://doi.org/10.1038/s41368-020-0074-x>

Lan, J., Ge, J., Yu, J. et al. Structure of the SARS-CoV-2 spike receptor-binding domain bound to the ACE2 receptor. *Nature* (2020). <https://doi.org/10.1038/s41586-020-2180-5>

### 🌐 Immunofluorescence analysis

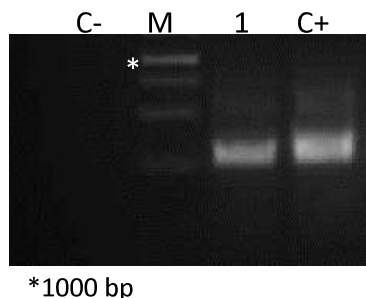
The detection of ACE2 protein in the cells surface was carried out by immunofluorescence analysis with an ACE2 primary antibody and a FITC secondary antibody.



**Figure 2. Immunofluorescence assay.** The image in the upper panel shows the membrane localization of ACE2 in HEK293 cell line. The image in the lower panel shows bright field.

### 🌐 RT-PCR analysis

The presence of ACE2 mRNA was analyzed by RT-PCR.



**Figure 1. ACE2 RT-PCR analysis.** (1) ACE2 HEK293 cell line. Positive Control (C+): ACE2 cDNA. Negative Control (C-): not transfected HEK293 cells.

### 🌐 Quality Control

All cells are performance assayed and test negative for mycoplasma, bacteria, yeast and fungi. Cell viability, morphology and proliferative capacity are measured after recovery from cryopreservation. Innoprot guarantees stable expression for many generations and provides support for cell culture and visualization.

**THIS PRODUCT IS FOR RESEARCH PURPOSES ONLY.** It is not to be used for drug or diagnostic purposes, nor is it intended for human use. Innoprot products may not be resold, modified for resale, or used to manufacture commercial products without written approval of Innovative Technologies in Biological Systems, S.L.

カタログ番号	BBP30902
品名	ACE2 HEK293
容量	3x10 <sup>6</sup> cells/vial
保存	液体窒素
価格 (円・税抜)	820,000

融解用培地：D-MEM(High Glucose) + 10%FBS

培養用培地：D-MEM(High Glucose) + 10%FBS  
+ 1%NEAA + Hygromycin(80ug/mL)

操作法につきましては、別資料にてご確認ください。

本細胞の提供には、MTAが必要になります。

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