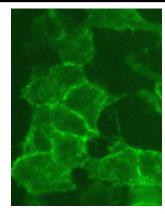


# **CELL LINES**

- SARS-CoV-2 (2019-nCoV) Spike V367F Mutant HEK 293 cell line-

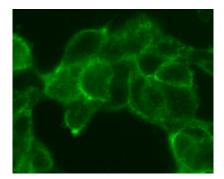


Product Name:	SARS-CoV-2	Spike	V367F	mutant
	HEK293 cell line			
Catalog Number:	P30911			
Cell Line:	HEK293			
Resistance:	Hygromycin			
Format:	>3x10 <sup>6</sup> cells in Cryopreserved vials			
Storage:	Liquid Nitrogen			

## SARS-CoV-2 V367F mutant

#### spike HEK293

The SARS-CoV-2 spike V367F mutant HEK293 cell line has been developed by stable transfection with SARS-CoV-2 (2019-nCoV) spike V367F mutant protein expression plasmid. SARS-CoV-2 spike HEK293 cell line provides consistent levels of expression of SARS-CoV-2 (2019-nCoV) spike V367F mutant protein in cells surface.



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

### About SARS-CoV-2 spike protein

The coronavirus S-protein is the structural protein responsible for the crown-like shape of the CoV viral SARS-CoV-2 particles.The spike protein mediates the membrane fusion utilizes human process, and angiotensin-converting enzyme 2 (hACE2) as the receptor to infect human cells.

Bibliography: Coutard, B., Valle, C., de Lamballerie, X., Canard, B., Seidah, N. G., & Decroly, E. (2020). The spike glycoprotein of the new coronavirus 2019-nCoV contains a furin-like cleavage site absent in CoV of the same clade. *Antiviral research*, 176, 104742. https://doi.org/10.1016/j.antiviral.2020.104742

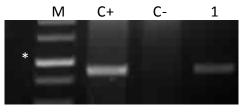
Xia, S., Liu, M., Wang, C. *et al.* Inhibition of SARS-CoV-2 (previously 2019-nCoV) infection by a highly potent pancoronavirus fusion inhibitor targeting its spike protein that harbors a high capacity to mediate membrane fusion. *Cell Res* **30**, 343–355 (2020). https://doi.org/10.1038/s41422-020-0305-

INNOVATIVE TECHNOLOGIES IN BIOLOGICAL SYSTEMS, S.L. Parque Tecnológico Bizkaia, Edf. 502, 1ª Planta | 48160 | Derio | Bizkaia Tel.: +34 944005355 | Fax: +34 946013455 innoprot@innoprot.com | www.innoprot.com



### 🔊 RT-PCR analysis

The presence of SARS-CoV-2 spike protein mRNA was analyzed by RT-PCR.

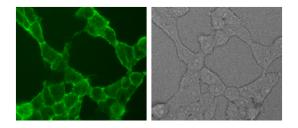


\*1000 bp

Figure 1. SARS-CoV-2 spike V367F mutant RT-PCR anaylisis. (1) SARS-CoV-2 spike V367 mutant HEK293 cell line. Positive Control (C+): SARS-CoV-2 spike 367 mutant cDNA. Negative Control (C-): not transfected HEK293 cells.

### S Immunofluorescence analysis

The detection of SARS-CoV-2 spike V367F mutant in the cells surface was carried out by immunofluorescence analysis with a FITC tagged anti-SARS-CoV-2 spike protein antibody.



**Figure 2. Immunofluorescence assay**. The image in the left panel shows the membrane localization of SARS-CoV-2 spike V367F mutant in HEK293 cell line. The image in the right panel shows bright field.

### S 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.