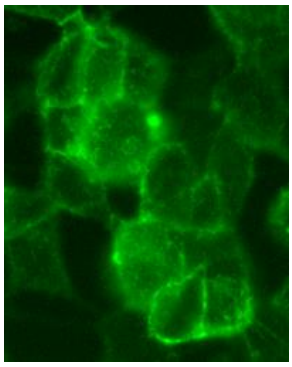
REF: P30912

CELL LINES

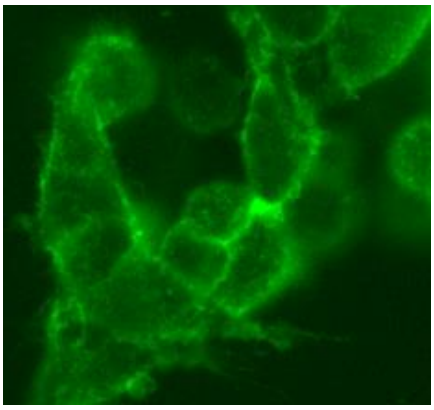
- SARS-CoV-2 (2019-nCoV) Spike V483A Mutant HEK 293 cell line-



Product Name:	SARS-CoV-2 Spike V483A mutant HEK293 cell line
Catalog Number:	P30912
Cell Line:	HEK293
Resistance:	Hygromycin
Format:	>3x10^6 cells in Cryopreserved vials
Storage:	Liquid Nitrogen

SARS-CoV-2 V483A mutant spike HEK293

The SARS-CoV-2 spike V483A mutant HEK293 cell line has been developed by stable transfection with SARS-CoV-2 (2019-nCoV) spike V483A mutant protein expression plasmid. SARS-CoV-2 spike HEK293 cell line provides consistent levels of expression of SARS-CoV-2 (2019-nCoV) spike V483A 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 particles.

The SARS-CoV-2 spike protein mediates the membrane fusion process, and utilizes human 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 pan-coronavirus 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-x

V.A.T. Nº: ESB95481909

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RT-PCR analysis

The presence of SARS-CoV-2 spike V483A mutant protein mRNA was analyzed by RT-PCR.

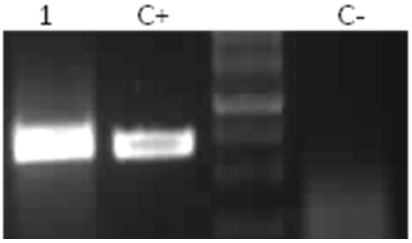

Figure 1. SARS-CoV-2 spike V483A mutant RT-PCR anaylisis. (1) SARS-CoV-2 spike protein V483A mutant cell line. Positive Control (C+): SARS-CoV-2 spike V483A mutant cDNA. Negative Control (C-): not transfected HEK293 cells.

Immunofluorescence analysis

The detection of SARS-CoV-2 spike V483A mutant in the cells surface was carried out by immunofluorescence analysis with a FITC tagged anti-SARS-CoV-2 spike protein antibody.

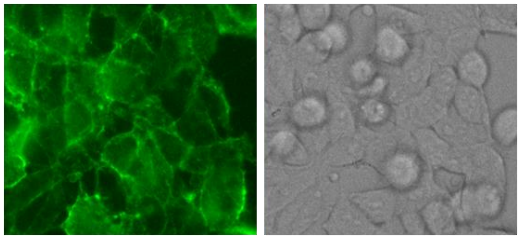

Figure 2. **Immunofluorescence assay**. The image in the left panel shows the membrane localization of SARS-CoV-2 spike V483A mutant in HEK293 cell line. The image in the right panel shows bright field.

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.

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