

CELL LINES

- SARS-CoV-2 (2019-nCoV) Spike HEK293T cell line-



Product Name:SARS-CoV-2 Spike HEK293T cell lineCatalog Number:P30908Cell Line:HEK293Resistance:HygromycinFormat:>3x10⁶ cells in Cryopreserved vialsStorage:Liquid Nitrogen

SARS-CoV-2 spike HEK293

The SARS-CoV-2 spike HEK293T cell line has been developed by stable transfection with SARS-CoV-2 (2019-nCoV) spike protein expression plasmid. SARS-CoV-2 spike HEK293T cell line provides consistent levels of expression of SARS-CoV-2 (2019nCoV) spike protein in cells surface.



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

S 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 spikeglycoprotein of the new coronavirus 2019-nCoV contains afurin-like cleavage site absent in CoV of the same clade.Antiviralresearch,176,104742.https://doi.org/10.1016/j.antiviral.2020.104742Xia, 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 thatharbors a high capacity to mediate membrane fusion. Cell Res30, 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 protein RT-PCR anaylisis. (1) SARS-CoV-2 spike protein HEK293T cell line. Positive Control (C+): SARS-CoV-2 spike protein cDNA. Negative Control (C-): not transfected HEK293 cells.

S Immunofluorescence analysis

The detection of SARS-CoV-2 spike protein 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 in HEK293T 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.