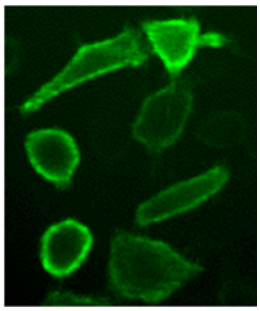
REF: P30907

CELL LINES

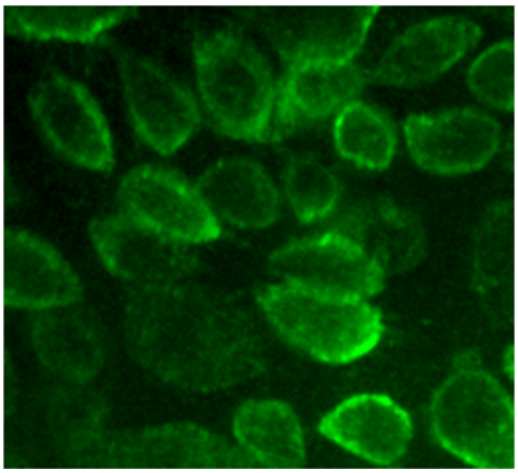
- SARS Coronovirus (SARS-CoV) Spike HEK 293T cell line-



Product Name:	SARS-CoV Spike HEK293T cell line
Catalog Number:	P30907
Cell Line:	HEK293T
Resistance:	Hygromycin
Format:	>3x10^6 cells in Cryopreserved vials
Storage:	Liquid Nitrogen

SARS-CoV spike HEK293

This cell line has been developed by stable transfection of SARS-CoV Spike Glycoprotein into HEK293T cell line. The resultant SARS-CoV Spike Glycoprotein HEK293T cell line provides consistent levels of expression of SARS-CoV Spike Glycoprotein in cells surface (a.k.a. SARS-CoV-1 to differentiate it from SARS-CoV-2).



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

About SARS-CoV spike protein

Coronaviruses (CoVs) infect human and animals and cause varieties of diseases, including respiratory, enteric, renal, and neurological diseases. An outbreak of atypical pneumonia, termed severe acute respiratory syndrome (SARS), appeared in the Guangdong Province of southern China in November, 2002. The mortality rates of the disease reached as high as 15% in some age groups.

SARS-CoV uses its spike glycoprotein (S), a main target for neutralization antibody, to bind its receptor, and mediate membrane fusion and virus entry. SARS-CoV Spike Glycoprotein uses hACE2 to enter cells, correlating with the efficient spread of SARS-CoV among humans.

Bibliography: Chad M. Petit et al. Genetic analysis of the SARS-coronavirus spike glycoprotein functional domains involved in cell-surface expression and cell-to-cell fusion. Virology. Volume 341, Issue 2, 25 October 2005, Pages 215-230

V.A.T. Nº: ESB95481909
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RT-PCR analysis

The presence of SARS-CoV Spike Glycoprotein mRNA was analyzed by RT-PCR.

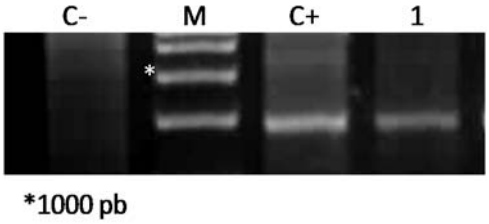

Figure 1. SARS-CoV spike protein RT-PCR analysis. (1) SARS-CoV spike protein HEK293T cell line. Positive Control (C+): SARS-CoV spike protein cDNA. Negative Control (C-): not transfected HEK293T cells.

Immunofluorescence analysis

The detection of SARS-CoV Spike Glycoprotein in the cells surface was carried out by immunofluorescence analysis with an primary antibody and a FITC secondary antibody.

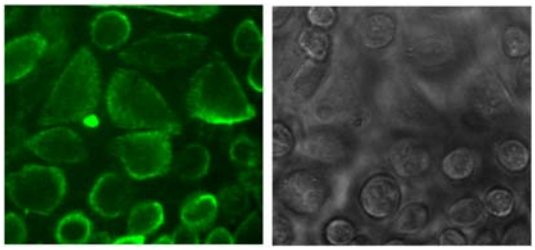

Figure 2. **Immunofluorescence assay**. The image in the left panel shows the membrane localization of SARS-CoV spike glycoprotein in HEK293T cell line. The image in the right panel shows the brightfield.

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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