

Covid-19 CELL LINES

SARS-CoV-2 (2019-nCoV) Nucleocapsid protein HEK 293 Cell Line -



Product Name: Catalog Number: Cell Line: Resistance: Format: Storage: SARS-CoV-2 Nucleocapside Cell Line P30920 HEK293 Hygromycin >3x10⁶ cells in Cryopreserved vials Liquid Nitrogen

SARS-CoV-2 Nucleocapsid HEK293

The Nucleocapsid Protein (NP) SARS-CoV-2 Cell Line has been developed by stable transfection of HEK 293 Cell Line with the SARS-CoV-2 (2019-nCoV) nucleocapsid protein expression plasmid. SARS-CoV-2 NP HEK293 cell line provides consistent levels of expression of SARS-CoV-2 (2019nCoV) nucleocapsid protein.



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

S About SARS-CoV-2 nucleocapsid

The nucleocapsid protein (NP) is a structural protein and an important antigen for coronaviruses. The NP-CoV protein participates in RNA package and virus particle release.

After infection, the NP enters the host cell together with the viral RNA to facilitate its replication and process the virus particle assembly and release.

Bibliography: Yoshimoto F. K. (2020). The Proteins of Severe Acute Respiratory Syndrome Coronavirus-2 (SARS CoV-2 or n-COV19), the Cause of COVID-19. *The protein journal, 39*(3), 198–216. https://doi.org/10.1007/s10930-020-09901-4 Zeng, W., Liu, G., Ma, H., Zhao, D., Yang, Y., Liu, M., Mohammed, A., Zhao, C., Yang, Y., Xie, J., Ding, C., Ma, X., Weng, J., Gao, Y., He, H., & Jin, T. (2020). Biochemical characterization of SARS-CoV-2 nucleocapsid protein. *Biochemical and biophysical research communications*, 527(3), 618–623. https://doi.org/10.1016/j.bbrc.2020.04.136

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🔊 RT-PCR analysis

The presence of SARS-CoV-2 Nucleocapsid Protein mRNA was analyzed by RT-PCR.



Figure 1. SARS-CoV-2 Nucleocapsid Protein RT-PCR anaylisis. (1) SARS-CoV-2 NP HEK293 cell line. Positive Control (C+): SARS-CoV-2 nucleocapsid protein cDNA. Negative Control (C-): not transfected HEK293 cells.

S Immunofluorescence analysis

The detection of SARS-CoV-2 nucleocapsid protein in the cells was carried out by immunofluorescence analysis with an anti-SARS-CoV-2 Nucleocapsid Protein antibody.



Figure 2. Immunofluorescence assay. The image in the left panel shows the localization of NP protein 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.

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