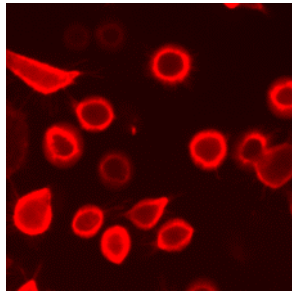


CELL LINES

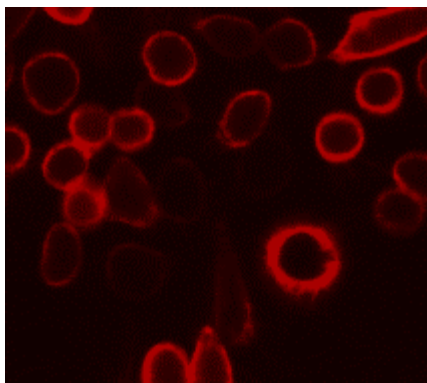
- IL6R CHO-K1-luc CELL LINE -



Product Name:	IL6R CHO-K1-luc cell line
Catalog Number:	P30503
Cell Line:	CHO-K1
Resistance:	Hygromycin + G418
Format:	>3x10 ⁶ cells in Cryopreserved vials
Storage:	Liquid Nitrogen

IL6R CHO-K1-luc cell line

The IL6R CHO-K1-luc cell line has been developed by stable co-transfection with a human Interleukin 6 Receptor (IL6R) and Luciferase proteins expression plasmids. IL6R CHO-K1-luc cell line provides consistent levels of expression of Luc and human ILR6 protein in cells surface.



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

About ILR6 protein

Interleukin-6 (IL-6) is an important member of the cytokine network and plays a central role in inflammation.

In the classical signal transduction pathway, IL-6 binds to its receptor IL-6R to form a complex, and then binds to the membrane protein gp130 to initiate intracellular signal transduction.

COVID19: Antagonists for IL6 could be a possible treatment for severe COVID19 patients with high levels of IL-6.

Bibliography: Baran, P., Hansen, S., Waetzig, G. H., Akbarzadeh, M., Lamertz, L., Huber, H. J., Ahmadian, M. R., Moll, J. M., & Scheller, J. (2018). The balance of interleukin (IL)-6, IL-6-soluble IL-6 receptor (sIL-6R), and IL-6-sIL-6R-sgp130 complexes allows simultaneous classic and trans-signaling. *The Journal of biological chemistry*, 293(18), 6762–6775.

<https://doi.org/10.1074/jbc.RA117.001163>

Zhang, C., Wu, Z., Li, J. W., Zhao, H., & Wang, G. Q. (2020). The cytokine release syndrome (CRS) of severe COVID-19 and Interleukin-6 receptor (IL-6R) antagonist Tocilizumab may be the key to reduce the mortality. *International journal of antimicrobial agents*, 105954. Advance online publication.

<https://doi.org/10.1016/j.ijantimicag.2020.105954>.

🧪 RT-PCR analysis

The presence of IL6R mRNA was analyzed by RT-PCR.

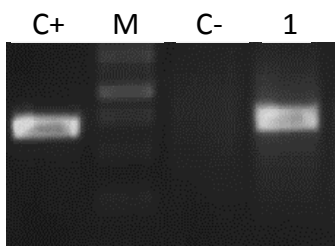


Figure 1. IL6R RT-PCR analysis. (1) IL6R CHO-K1-luc cell line. Positive Control (C+): IL6R cDNA. Negative Control (C-): not transfected CHO-K1 cells.

🧪 Immunofluorescence analysis

The detection of IL6R protein in the cells surface was carried out by immunofluorescence analysis with a PE tagged anti-IL6R antibody.

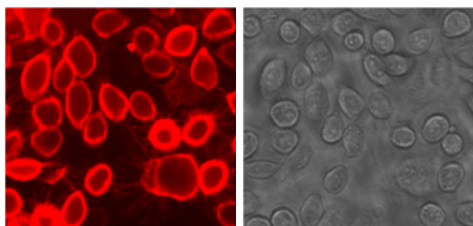


Figure 2. Immunofluorescence assay. The image in the left panel shows the membrane localization of IL6R in CHO-K1 cell line. The image in the right panel shows bright field.

🧪 Luciferase assay

Double positive clones were verified with a luciferase assay kit from Sigma (#LUC1). Luminiscence detection was carried out with the Synergy 2 Multi-Mode Microplate reader from BioTek.

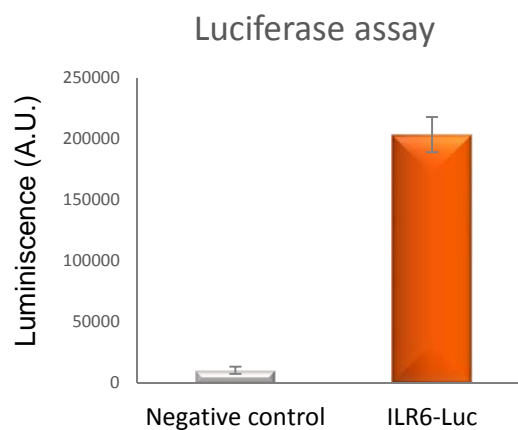


Figure 3. Luciferase analysis. The graph shows the luminiscence detection of negative control (non-transfected CHO-K1 cells, grey) and IL6R CHO-K1-luc cell line (orange).

🧪 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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