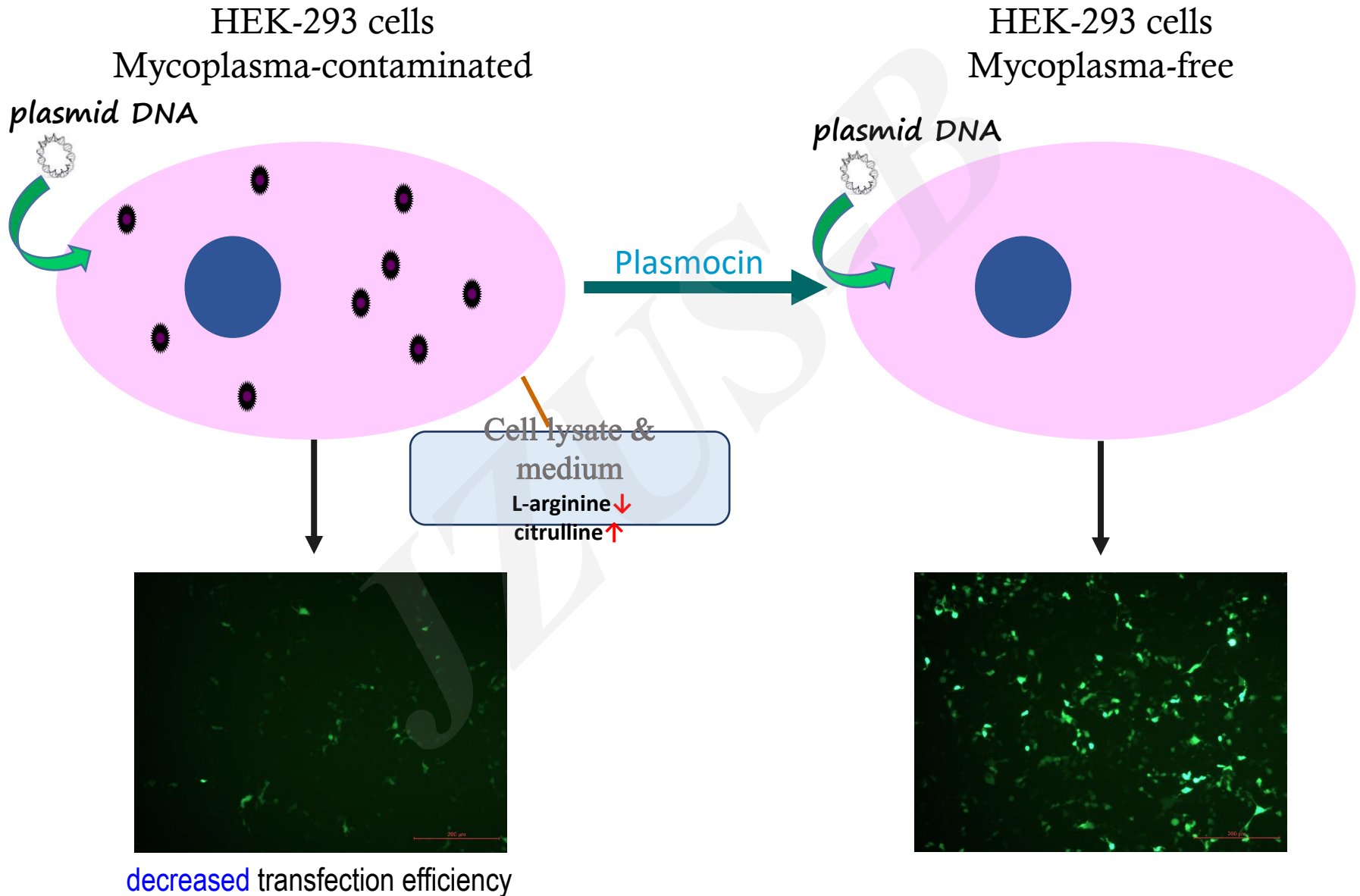


Cite this as : Zi-fei YIN, Ya-ni ZHANG, Shu-fang LIANG, Sha-sha ZHAO, Juan DU, Bin-bin CHENG, 2019. Mycoplasma contamination-mediated attenuation of plasmid DNA transfection efficiency is augmented via L-arginine deprivation in HEK-293 cells. *Journal of Zhejiang University-Science B (Biomedicine & Biotechnology)*, 20(12):1021-1026. <https://doi.org/10.1631/jzus.B1900380>

Mycoplasma contamination-mediated attenuation of plasmid DNA transfection efficiency is augmented via L-arginine deprivation in HEK-293 cells

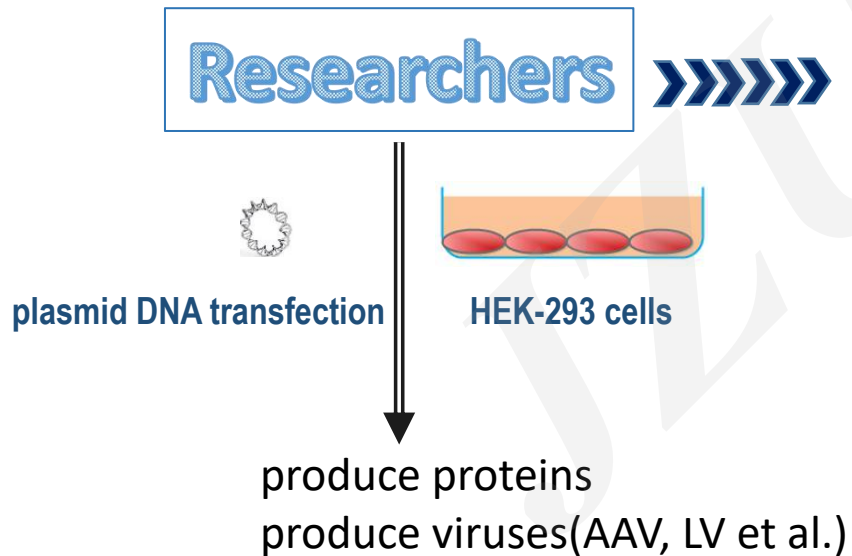
Key words: Mycoplasma, Contamination, Transfection efficiency, HEK-293 cell, Cell culture

Research Summary



Innovation points

- Mycoplasma, a notorious cell culture contaminant, can remarkably diminish plasmid DNA transfection efficiency in HEK-293 cells.
- This catastrophic effect of poor transfection efficiency is related to L-arginine deprivation in mycoplasma contaminated cells.



Attention

- Monitoring the presence of mycoplasma regularly in HEK-293 cells.
- Utilize anti-mycoplasma treatment (e.g. Plasmocin) promptly and adequately to eliminate mycoplasma contamination if necessary, in order to sustain stable and efficient plasmid DNA transfection efficiency.