



UNIVERSITY OF MADRAS

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Report on evaluation of cell viability assay for Forbes Coronaguard powered by Shycocan

Objective:

- Cell viability study of Forbes Coronaguard powered by Shycocan in Vero cells (African green monkey kidney epithelial cells)

Scope:

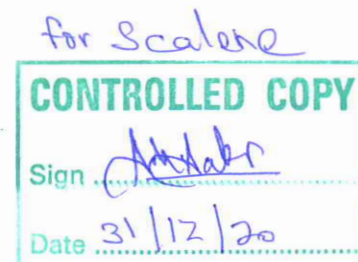
- Cell viability study at different time post treatment of Forbes Coronaguard powered by Shycocan

Testing methodology:

- The viability of the Vero cells (African green monkey kidney epithelial cells) upon exposure to electrons was evaluated to scrutinize the impact of electron emission from Forbes Coronaguard on cell lines. Vero cells were exposed to emanated electron from Forbes coronaguard powered by Shycocan for different time period (1hr, 6hrs, 12hrs, 18hrs and 24hrs) and viability was analysed using cell counting kit-8 (CCK-8) (Sigma Aldrich, USA) following manufacturer's protocol.

Performance Analysis:

- The cell viability was calculated as percentage of viable cells and then plotted on a graph.



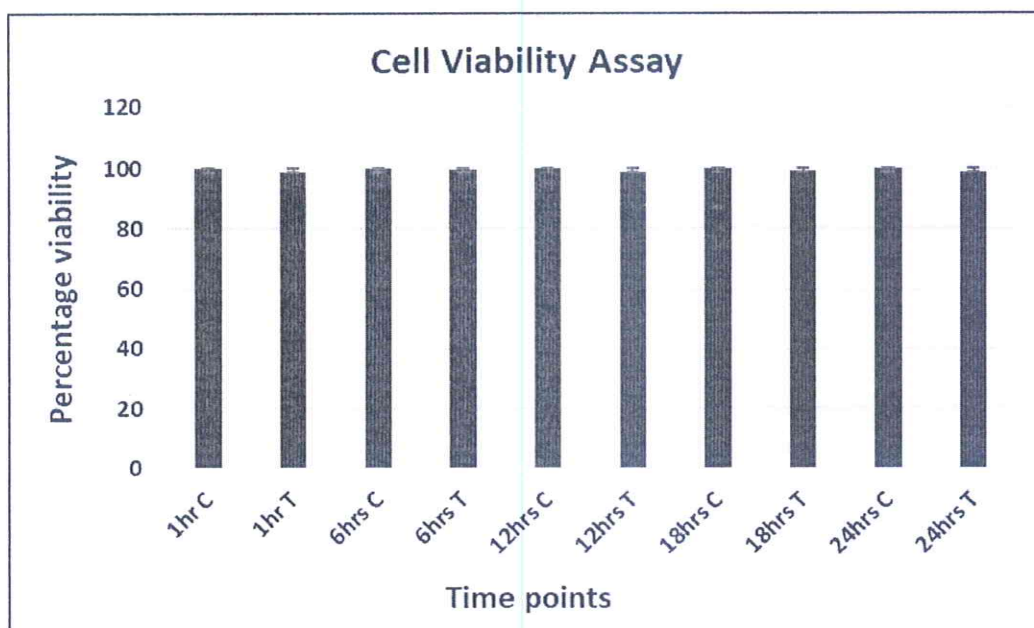


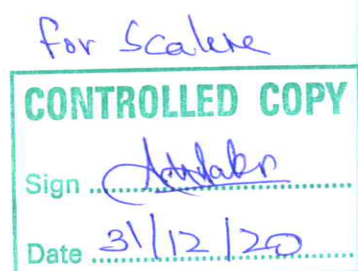
Fig 1. Viability of Vero cells upon exposure to electron emission from Forbes Coronaguard for different time points. 'X' axis denotes the Time points in hours. 'Y' axis denotes the viability of cells in percentage. C= control; T= treated

Conclusion:

- The obtained results showed no significant difference between the viability of control and exposed cells indicating that the emitted electrons from Forbes Coronaguard had no impact on the viability of cells upon exposure for all the time points. Categorically, these results showed that the Forbes Coronaguard powered by Shycocan is non-toxic to the Vero cells (African green monkey kidney epithelial cells).

Reference:

- ❖ Eric Chen, Miguel Ruvalcaba, Lindsey Araujo, Ryan Chapman & Wei-Chun Chin (2008) Ultrafine titanium dioxide nanoparticles induce cell death in human bronchial epithelial cells, Journal of Experimental Nanoscience, 3:3, 171-183.
- ❖ Ascenso, A., Pedrosa, T., Pinho, S., Pinho, F., de Oliveira, J. M., Cabral Marques, H., Oliveira, H., Simões, S., & Santos, C. (2016). The Effect of Lycopene Preexposure on UV-B-Irradiated Human Keratinocytes. Oxidative medicine and cellular longevity, 2016, 8214631.



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