2016

Vol.4 No.2:78

Membranolytic Effects of an Anticancer Peptide Investigated by Atomic Force Microscopy

Luciano Paulino Silva

Laboratory of Nanobiotechnology (LNANO), Embrapa Genetic Resources and Biotechnology - Cenargen, Brasília, Brazil

Corresponding author: Luciano Paulino Silva, Laboratory of Nanobiotechnology (LNANO), Embrapa Genetic Resources and Biotechnology – Cenargen, Brasília, Brazil, Tel: (61) 3448-4433; E-mail: luciano.paulino@embrapa.br; lucianopaulinosilva@gmail.com

Received: 04 June 2016; Accepted: 06 June 2016; Published: 08 June 2016

Citation: Silva LP. Atomic Force Microscopy Top-view Images of the Topographical Surface of Control HeLa Cells. Arch Can Res. 2016, 4: 2.

Microscopic Image

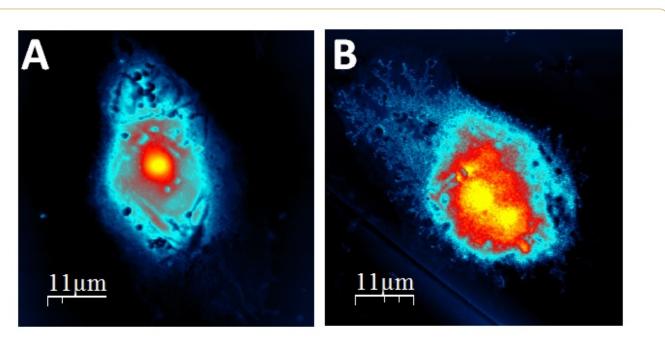


Figure 1 Top-view images of the topographical surface of control HeLa cells.

Atomic force microscopy top-view images of the topographical surface of control HeLa cells (A) or after 24 hr of incubation in vitro with a membrane-active and cytolytic peptide (B). The anticancer peptide irreversibly disrupts the cell membrane integrity and releases the intracellular components (Figure 1) [1-3].

References

 Caetano BC, Joanitti GA, Silva LP (2015) In vitro cytotoxic activity of chitosan-bullfrog oil microemulsion against melanoma cells. Nanobiotechnology IET 9: 172-177.

- Medeiros KA, Joanitti GA, Silva LP (2014) Chitosan nanoparticles for dermaseptin peptide delivery toward tumor cells in vitro Anti-cancer drugs 25: 323-331.
- 3. Bemquerer MP, Macedo JK, Ribeiro AC, Carvalho AC, Silva DO, et al. (2012) Partial characterization of a novel amphibian hemoglobin as a model for graduate student investigation on peptide chemistry, mass spectrometry, and atomic force microscopy. Biochemistry and Molecular Biology Education 40: 121-129.