### Accepted Manuscript

pH-sensitive tangeretin-ZnO quantum dots exert apoptotic and anti-metastatic effects in metastatic lung cancer cell line

A. Roshini, Srikanth Jagadeesan, Lakshmi Arivazhagan, Young-Jae Cho, Jong-Hwan Lim, Yang-Hoi Doh, Sang-Jae Kim, Jinhee Na, Kyung Hyun Choi

PII: S0928-4931(17)33501-4

DOI: doi:10.1016/j.msec.2018.06.073

Reference: MSC 8712

To appear in: Materials Science & Engineering C

Received date: 30 August 2017 Revised date: 3 June 2018 Accepted date: 30 June 2018

Please cite this article as: A. Roshini, Srikanth Jagadeesan, Lakshmi Arivazhagan, Young-Jae Cho, Jong-Hwan Lim, Yang-Hoi Doh, Sang-Jae Kim, Jinhee Na, Kyung Hyun Choi, pH-sensitive tangeretin-ZnO quantum dots exert apoptotic and anti-metastatic effects in metastatic lung cancer cell line. Msc (2018), doi:10.1016/j.msec.2018.06.073

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



## **ACCEPTED MANUSCRIPT**

# pH-sensitive tangeretin-ZnO quantum dots exert apoptotic and anti-metastatic effects in metastatic lung cancer cell line

Roshini A $^1$ \*, Srikanth Jagadeesan $^2$ \*, Lakshmi Arivazhagan $^3$ , Young-Jae Cho $^4$ , Jong-Hwan Lim $^5$ , Yang-Hoi Doh $^2$ , Sang-Jae Kim $^6$ , Jinhee Na $^7$ , Kyung Hyun Choi $^{1,2}$ ¶

Kyung Hyun Choi, PhD

Department of Mechatronics Engineering, Advanced Convergence Technology and Science, Jeju National University, 63243, Korea. E-mail: amm@jejunu.ac.kr; Tel: +82 1098983713.

Abbreviations<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Department of Mechatronics Engineering, Jeju National University, 63243, South Korea. E-mail: amm@jejunu.ac.kr; Tel: +82 1098983713.

<sup>&</sup>lt;sup>2</sup> Department of Advanced Convergence Technology and Science, Jeju National University, 63243, South Korea. E-mail: yhdoh@jejunu.ac.kr; Tel: +821095353663.

<sup>&</sup>lt;sup>3</sup> Perelman School of Medicine, University of Pennsylvania, Philadelphia, 19104, USA. E-mail: lakshmi.biotech2007@gmail.com.

<sup>&</sup>lt;sup>4</sup> Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, Seoul National University Bundang Hospital, 13620, South Korea. E-mail: lungdrcho@gmail.com.

<sup>&</sup>lt;sup>5</sup> Department of Mechatronics Engineering, Jeju National University, 63243, South Korea. E-mail: jhlim@jejunu.ac.kr; Tel: +821045163713.

<sup>&</sup>lt;sup>6</sup> Nanomaterials and System Lab, Department of Mechatronics Engineering, Jeju National University, 63243, South Korea. E-mail: kimsangj@jejunu.ac.kr.

<sup>&</sup>lt;sup>7</sup> Biophilic Ltd., 152, Juggunro, Youngin-si, Gyunggi-do, South Korea. E-mail: rindysna@gmail.com.

<sup>\*</sup> These authors contributed equally to this work.

<sup>&</sup>lt;sup>¶</sup>Correspondence

<sup>&</sup>lt;sup>1</sup> QD, quantum dots; FTIR, Fourier transform infrared spectroscopy; TUNEL, Terminal deoxynucleotidyl transferase dUTP nick end labeling; AFM, atomic force microscopy; TEM, transmission electron microscopy; XRD, x-ray diffraction; Tan-ZnO QDs, tangeretin-zinc oxide quantum dots; selected area electron diffraction (SEAD); PL, photoluminescence

#### Download English Version:

# https://daneshyari.com/en/article/7865825

Download Persian Version:

https://daneshyari.com/article/7865825

Daneshyari.com