



Supplementary figures

## Investigation of molecular mechanisms involved in susceptibility to the anti-cancer activity of costunolide in breast cancer cells

Yu-Jeong Choi <sup>1</sup>, Youn Kyung Choi <sup>2</sup>, Seong-Gyu Ko <sup>3</sup>, Chunhoo Cheon <sup>3,\*</sup> and Tai Young Kim <sup>4,\*</sup>

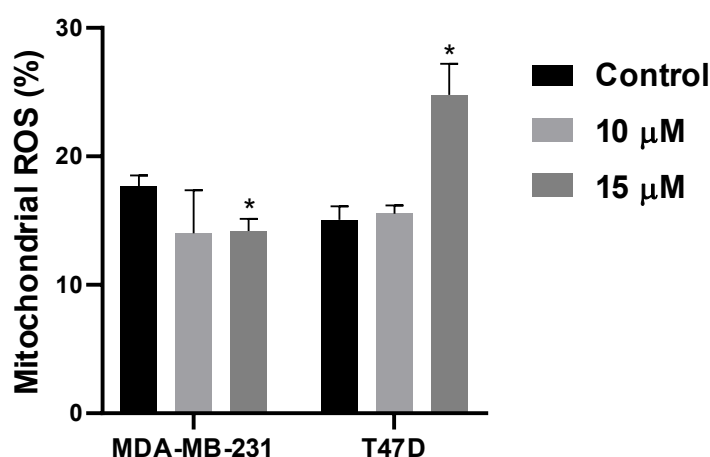
<sup>1</sup> Department of Science in Korean Medicine, Graduate School, Kyung Hee University, Seoul, 02447, Korea

<sup>2</sup> Jeju Research Center for Natural Medicine, Jeju National University, Jeju, 63243, Korea

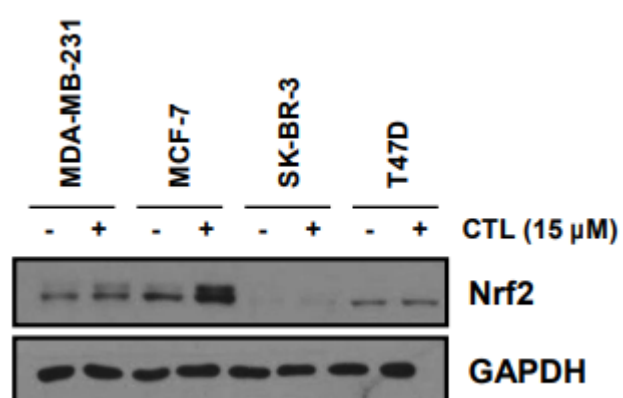
<sup>3</sup> Department of Preventive Medicine, College of Korean Medicine, Kyung Hee University, Seoul, 02447, Korea

<sup>4</sup> Center for Cognition and Sociality, Institute for Basic Science, Daejeon, 34126, Korea

\* Correspondence: hreedom@khu.ac.kr; Tel.: 82-2-961-0329, taik@ibs.re.kr; Tel: 82-42-878-9155



**Figure S1.** Mitochondrial ROS levels in breast cancer cells. Cells were treated with CTL for 1 h and stained with MitoSOX dye for 30 min. ROS levels were detected by flow cytometry (FACSCalibur, BD Biosciences, USA). Data represent the mean  $\pm$  SD. \*,  $P < 0.05$  by Student's t-test.



**Figure S2.** The protein levels of Nrf2 in breast cancer cells. Cells were treated with CTL (15 μM) for 1 h. Western blot analysis was performed using an Nrf2 antibody (#12721, Cell Signaling Technology).