



Supplementary Materials: The Phenoxyphenol Compound diTFPP Mediates Exogenous C₂-Ceramide Metabolism, Inducing Cell Apoptosis Accompanied by ROS Formation and Autophagy in Hepatocellular Carcinoma Cells

Wen-Tsan Chang 1,2,3†, Yung-Ding Bow 4,†, Yen-Chun Chen 5, Chia-Yang Li 6, Jeff Yi-Fu Chen 5, Yi-Ching Chu 7, Yen-Ni Teng 8, Ruei-Nian Li 9 and Chien-Chih Chiu 3,5,10,11,12,*

- Division of General and Digestive Surgery, Department of Surgery, Kaohsiung Medical University Hospital, Kaohsiung 807, Taiwan; wtchang@kmu.edu.tw
- ² Department of Surgery, School of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung 807, Taiwan
- ³ Center for Cancer Research, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Kaohsiung 807, Taiwan
- 4 College of Life Science, Kaohsiung Medical University; Kaohsiung 807, Taiwan; u109850001@kmu.edu.tw
- Department of Biotechnology, Kaohsiung Medical University, Kaohsiung 807, Taiwan; r020135@gap.kmu.edu.tw (Y.-C.C.); yifuc@kmu.edu.tw (J.Y.-F.C.)
- ⁶ Graduate Institute of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung 807, Taiwan; chiayangli@kmu.edu.tw
- Department of Medicinal and Applied Chemistry, Kaohsiung Medical University, Kaohsiung 807, Taiwan; N56094512@ncku.edu.tw
- Bepartment of Biological Sciences and Technology, National University of Tainan, Tainan 700, Taiwan; tengyenni@mail.nutn.edu.tw
- 9 Department of Biomedical Science and Environment Biology, Kaohsiung Medical University, Kaohsiung 807, Taiwan; runili@kmu.edu.tw
- ¹⁰ Department of Biological Sciences, National Sun Yat-Sen University, Kaohsiung, 804, Taiwan
- $^{\rm 11}~$ The Graduate Institute of Medicine, Kaohsiung Medical University, Kaohsiung 807, Taiwan
- ¹² Department of Medical Research, Kaohsiung Medical University Hospital, Kaohsiung 807, Taiwan
- * Correspondence: cchiu@kmu.edu.tw; Tel.: +886-7-312-1101 (ext. 2368); Fax: +886-7-312-5339
- † The authors contributed equally.

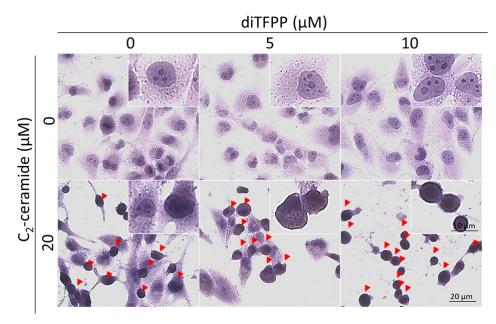


Figure S1. The morphology of HA22T cells with hematoxylin staining after diTFPP/C2-ceramide treatment. The red arrows indicate pyknotic cells.

Antioxidants **2021**, 10, 394

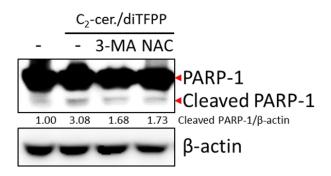


Figure S2. Western blot analysis of PARP-1 expression after C2-ceramide and diTFPP treatment.

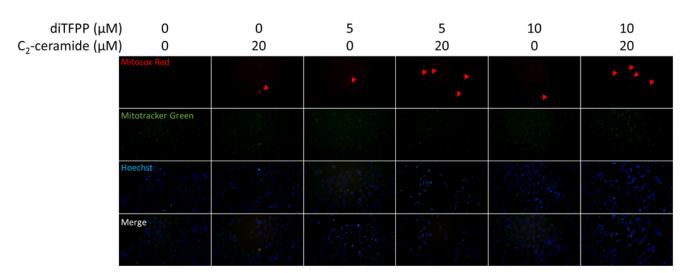


Figure S3. Mitochondrial ROS generation in C2-ceramide- and diTFPP-treated HA22T cells based on MitoSOX Red (red), MitoTracker Green (green), and Hoechst (blue) staining. Red arrows indicate accumulated mitochondrial ROS.