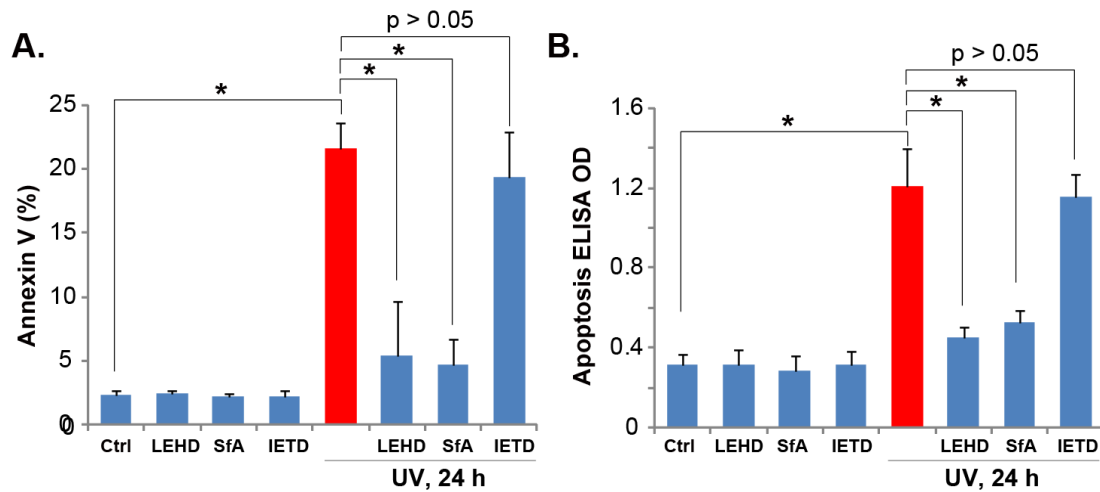


**The supplementary figures of the manuscript:**

***3H-1,2-dithiole-3-thione protects retinal pigment epithelium cells against Ultra-violet radiation via activation of Akt-mTORC1-dependent Nrf2-HO-1 signaling***

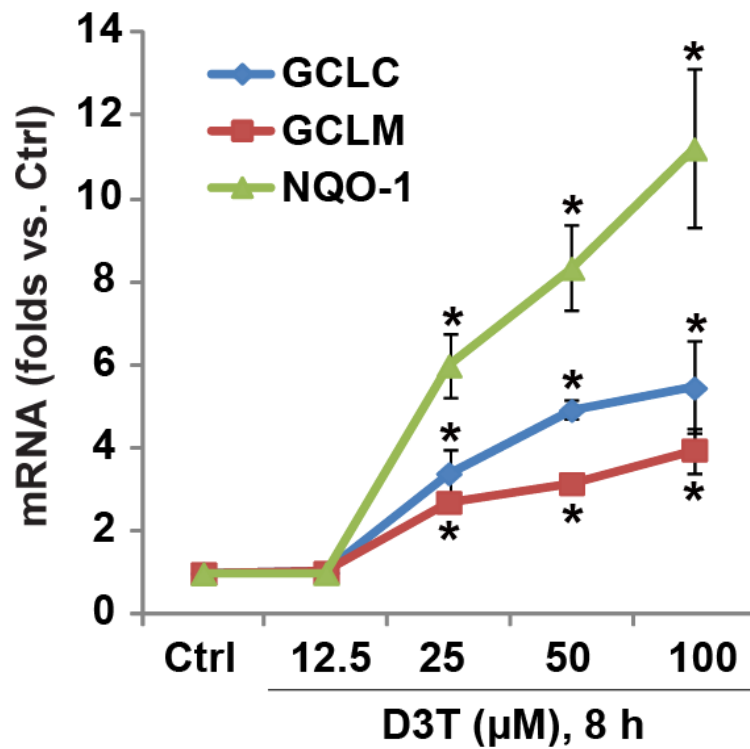
Ke-ran Li, Su-qing Yang, Yi-qing Gong, Hong Yang, Xiu-miao Li, Yu-xia Zhao, Jin Yao, Qin Jiang and Cong Cao

**Supplementary Fig. 1.** of “3H-1,2-dithiole-3-thione protects retinal pigment epithelium cells against Ultra-violet radiation via activation of Akt-mTORC1-dependent Nrf2-HO-1 signaling” by Ke-ran Li, Su-qing Yang, Yi-qing Gong, Hong Yang, Xiu-miao Li, Yu-xia Zhao, Jin Yao, Qin Jiang and Cong Cao.



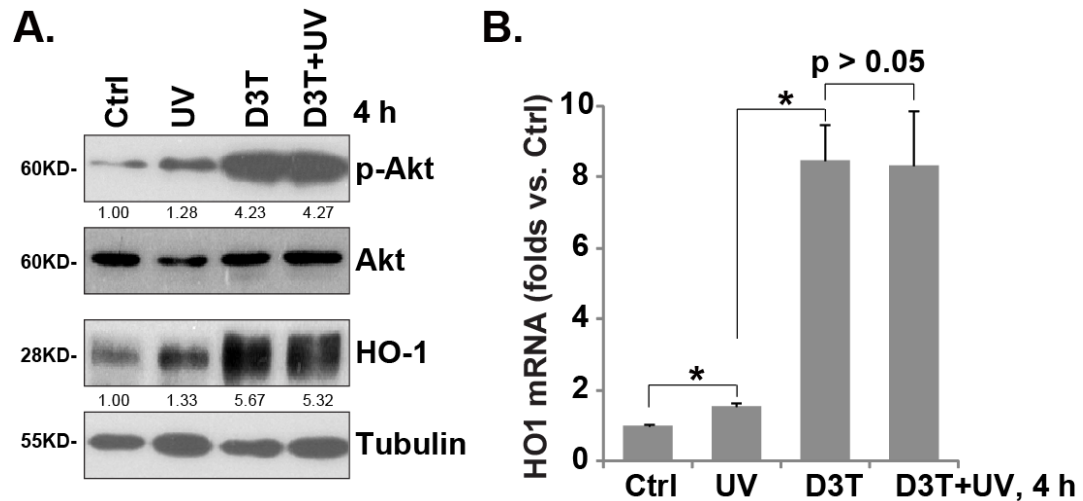
**Supplementary Fig. 1.** APRE-19 cells were pre-treated with the caspase-9 specific inhibitor z-LEHD-fmk (“LEHD”, 50  $\mu$ M), and the caspase-8 specific inhibitor z-IETD-fmk (50  $\mu$ M) or sangliferhin A (SfA, 1.0  $\mu$ M) for 30 min, followed by UV (30  $\text{mJ}/\text{cm}^2$ ) irradiation, cells were further cultured for 24 h. Cell apoptosis was tested by PI-Annexin V FACS assay (**A**) and histone-DNA apoptosis ELISA assay (**B**). Experiments were repeated three times to insure consistency of results. \* $p < 0.05$ .

**Supplementary Fig. 2.** of “3H-1,2-dithiole-3-thione protects retinal pigment epithelium cells against Ultra-violet radiation via activation of Akt-mTORC1-dependent Nrf2-HO-1 signaling” by Ke-ran Li, Su-qing Yang, Yi-qing Gong, Hong Yang, Xiu-miao Li, Yu-xia Zhao, Jin Yao, Qin Jiang and Cong Cao.



**Supplementary Fig. 2.** Relative mRNA expression of listed genes in D3T-treated APRE-19 cells was shown (A). \* $p < 0.05$  vs. Ctrl.

**Supplementary Fig. 3.** of “3H-1,2-dithiole-3-thione protects retinal pigment epithelium cells against Ultra-violet radiation via activation of Akt-mTORC1-dependent Nrf2-HO-1 signaling” by Ke-ran Li, Su-qing Yang, Yi-qing Gong, Hong Yang, Xiu-miao Li, Yu-xia Zhao, Jin Yao, Qin Jiang and Cong Cao.



**Supplementary Fig. 3.** APRE-19 cells were irradiated with UV (30 mJ/cm<sup>2</sup>) with or without D3T (50 μM, 30 min pretreatment), cells were further cultured for 4 h. Expressions of listed proteins were tested by Western blots (A), Akt phosphorylation and HO-1 protein expression were quantified (A). Relative HO-1 mRNA expression was examined by Real-time PCR assay (B). Experiments were repeated three times to insure consistency of results. \**p*<0.05.