Supporting Information

Induction of APOBEC3C Facilitates the Genotoxic Stress-Mediated Cytotoxicity of Artesunate

Li Tao †‡§, Zhuangzhuang Jiang †‡§, Min Xu †‡, Tingting Xu †‡, Yanqing Liu *†‡

† College of Medicine, Yangzhou University, Yangzhou, Jiangsu 225001, China
‡ The State Administration of Traditional Chinese Medicine Key Laboratory of Toxic Pathogens-Based Therapeutic Approaches of Gastric Cancer, Yangzhou University, Yangzhou, Jiangsu 225009, China

Corresponding Author

* Email: liuyq@yzu.edu.cn

Present Addresses

§ The State Administration of Traditional Chinese Medicine Key Laboratory of Toxic Pathogens-Based Therapeutic Approaches of Gastric Cancer, College of Medicine, Yangzhou University, 88 South University Avenue, Yangzhou 225009, Jiangsu, China.
Table of Content

Figure S1..............................................................................................Page S1
Figure S2..............................................................................................Page S2
Figure S3..............................................................................................Page S3
Figure S4..............................................................................................Page S4
Figure S1 | Establishment of A3C overexpression in H1299 cells. H1299 cells were stably transfected with empty pCMV6 and Flag-A3C vectors, the mRNA levels of A3C was detected by real-time PCR assay and electrophoresis (A) and the cells were treated with or without Art (20 μM) for 6 h. Cell lysates were analyzed by Western blot assay.
Figure S2 | Representative images of the effect of mutant A3C on the formation of DNA damage foci and growth colony upon Art-treatment in H1299 cells. (A) Confocal images of γH2AX foci formation in A3C-mutant and control H1299 cells with or without Art (20 μM) treatment. 100× magnification images, scale bar represents 50 μm. (B) Representative images of colony formation assay in A3C-mutant and control H1299 cells with or without Art (20 μM) treatment.
Figure S3 | Validation of knockdown efficiency of A3C in H1299 cells. (A) H1299 cells grown in 6-well plates were transfected with transfection reagent only (Mock), nonspecific scramble siRNA as a control (sc-Con), mixture of three siRNA (si-RNA-mix, 60 pmoles in total), si-RNA-1, si-RNA-2, and si-RNA-3 (20 pmoles each) targeting A3C. Cells were transfected for 48 h and detected for Western blot. (B) Transfection efficiency of mixed siRNA oligos was further confirmed with real-time PCR assay.
Figure S4 | The effect of knockdown of A3C on the formation of DNA damage foci and growth colony upon Art-treatment in H1299 cells. (A) Confocal images of γH2AX foci formation in si-A3C and sc-Con-transfected H1299 cells with or without Art (20 μM) treatment. 100× magnification images, scale bar represents 50 μm. (B) Representative images of colony formation assay in si-A3C and sc-Con-transfected H1299 cells with or without Art (20 μM) treatment.