WBSCR22 confers oxaliplatin resistance in human colorectal cancer

Dongmei Yan, Linglan Tu, Haining Yuan, Jianfei Fang, Liyan Cheng, Xiaoliang Zheng* and Xiaoju Wang* The Center for Molecular Medicine, Zhejiang Academy of Medical Sciences, Hangzhou, 310013, Zhejiang, China * wangxj@zjams.com.cn, zhengxl@zjams.com.cn

Supplementary information



Supplementary figure S1. The expression of WBSCR22 at both protein and gene levels in human CRC cell lines with different oxaliplatin sensitivity. (A) Western blot of the endogenous WBSCR22 protein in CRC cells. (B) RT-qPCR analysis of *WBSCR22* gene in CRC cells. (C) Proliferation of various CRC cells in the presence of oxaliplatin. All results were representative of three independent experiments and the data were expressed as the mean \pm SD.



Supplementary figure S2. Knockdown of *WBSCR22* in Caco-2 cells by shRNA2. (**A**) Western blot analysis of WBSCR22 protein in WT, shCon, and shRNA2 treated Caco-2 cells. (**B**) RT-qPCR analysis of *WBSCR22* mRNA expression. **p < 0.01 (shRNA2 v.s. either WT or shCon). (**C**) Proliferation of the shCon and shRNA2 treated cells in the presence of oxaliplatin. All results were representative of three independent experiments and the data were expressed as the mean ± SD.



Supplementary figure S3. *WBSCR22* knockdown increased oxaliplatin-induced ROS generation in CRC cells. HT-29, Caco-2 and RKO cells were treated with oxaliplatin at the indicated concentrations for 1 hour. Intracellular DCFH fluorescence images were captured by a fluorescence microscope.



Fig. 2A HT-29



Fig. 2A Caco-2



Fig. 2A RKO



Fig. 4A



Fig. 4C



Fig. 5C HT-29



Fig. 5C Caco-2



Fig. 5C RKO



Fig. S1



Fig. S2