Electronic Supplementary Material (ESI) for RSC Advances.

Supplemental Figures

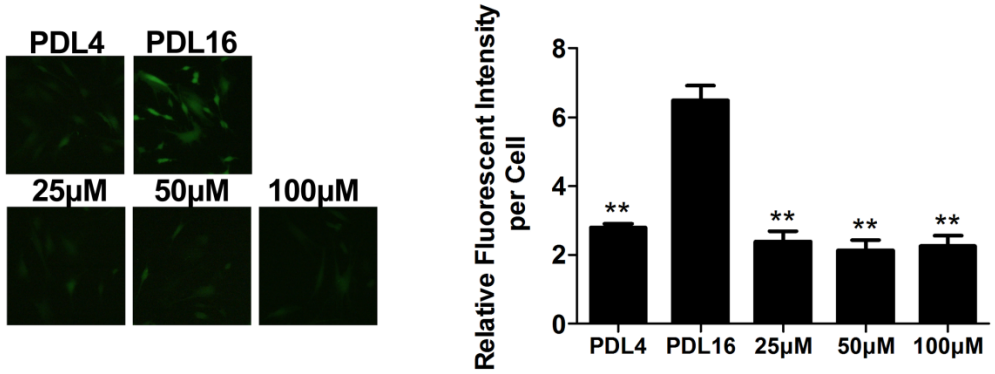

Fig. S1 ABO significantly reduced ROS level in senescent cells. Relative fluorescence intensity of ROS was quantified (**p < 0.01 versus PDL 16, results were expressed as mean ± SEM, n = 3.).

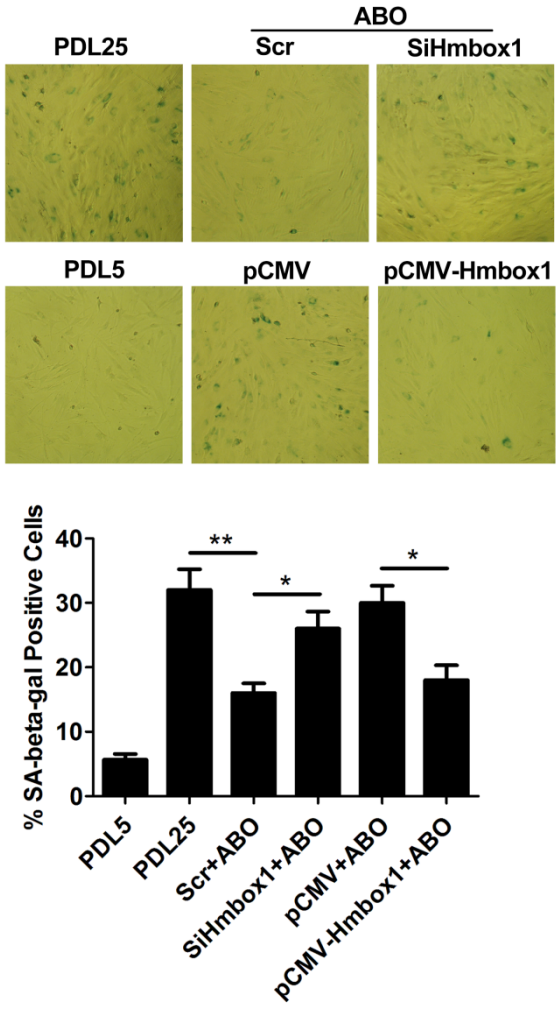

Fig.S2 SA-β-Gal experiment suggested that Hmbox1 was essential for senescence inhibition by ABO and demonstrated to be a senescence-associated protein. PDL 20 cells subject to 60 nM Hmbox1 siRNA appreciably attenuated anti-aging effect of ABO, whereas its overexpression by transfecting pCMV-Hmbox1 greatly reduced positively stained cells (*p < 0.05, **p < 0.01, results are expressed as

mean ± SEM, n = 3.).

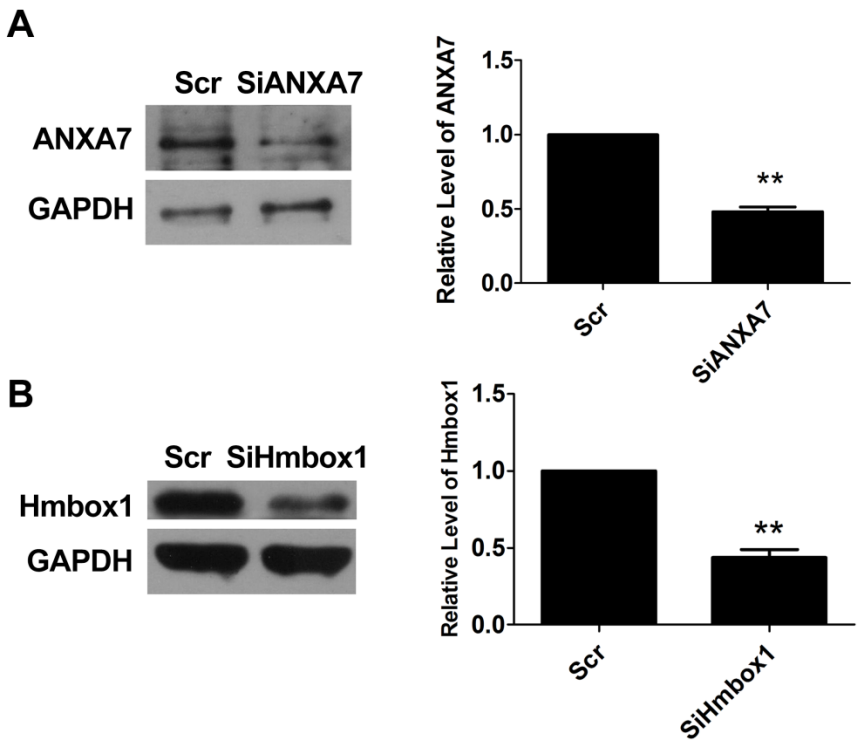

Fig. S3 The efficiency of RNA interference for ANXA7 and Hmbox1 was verified by western blot assay. A: Senescent BMSCs were transfected with 20 nM ANXA7 siRNA or 20 nM scrambled siRNA as negative control. Quantification of western blot result showed that the protein level of ANXA7 could be reduced by 50 percent (**P < 0.01 versus scrambled group, results are expressed as mean ± SEM, n = 3.). B: Cells were exposed to 60 nM Hmbox1 siRNA or 60 nM scrambled siRNA and the protein level of the silencing group was approximately 45 percent versus the control group (**P < 0.01 versus scrambled group, results are expressed as mean ± SEM, n = 3.).