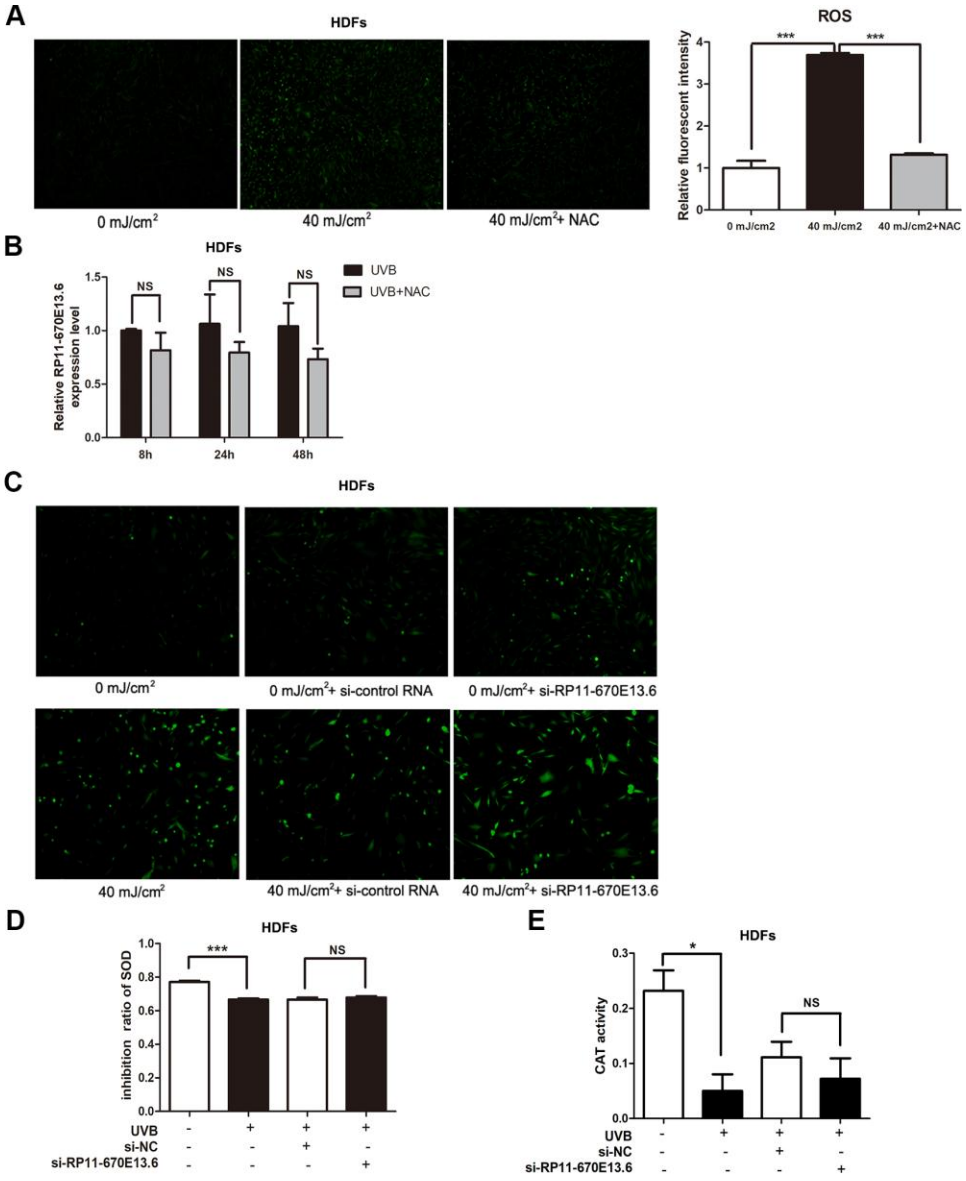
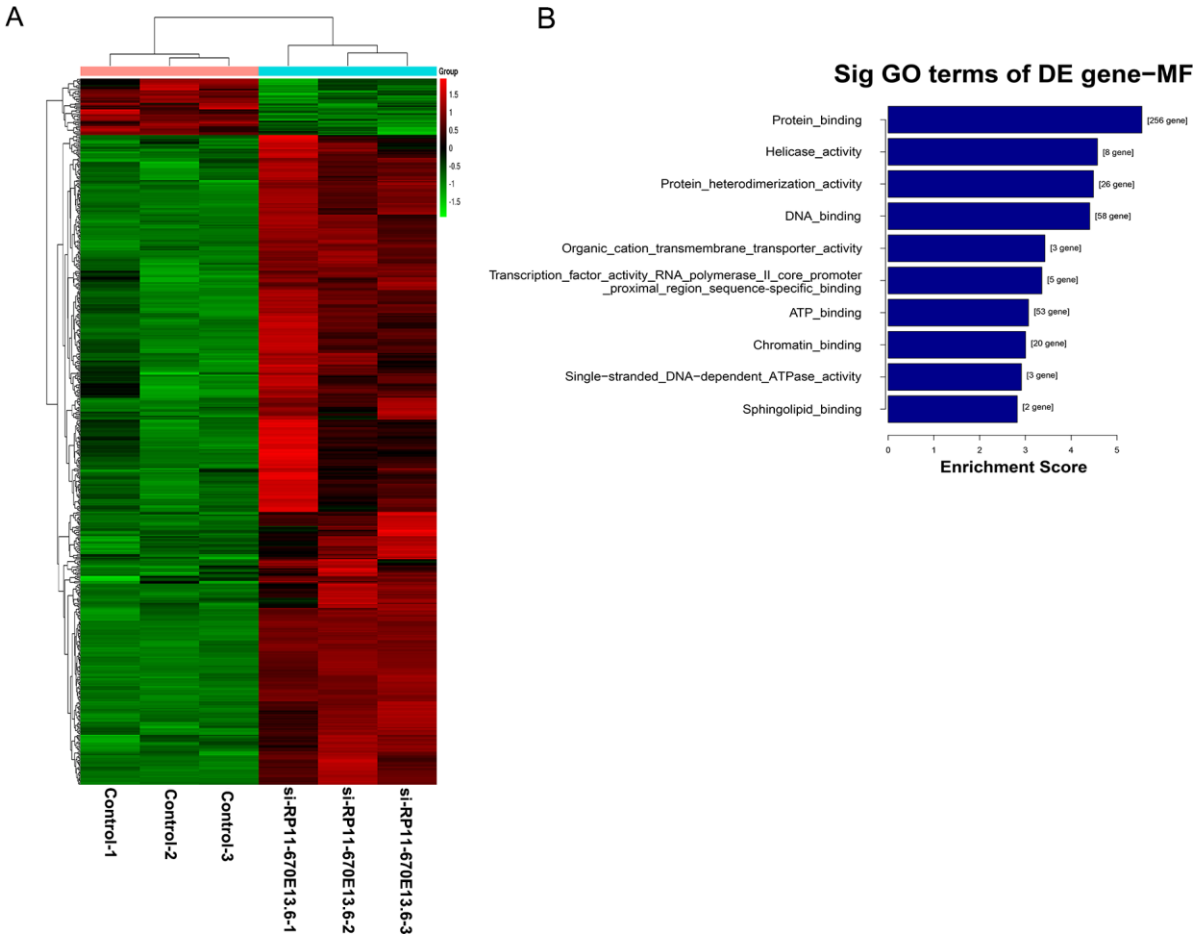
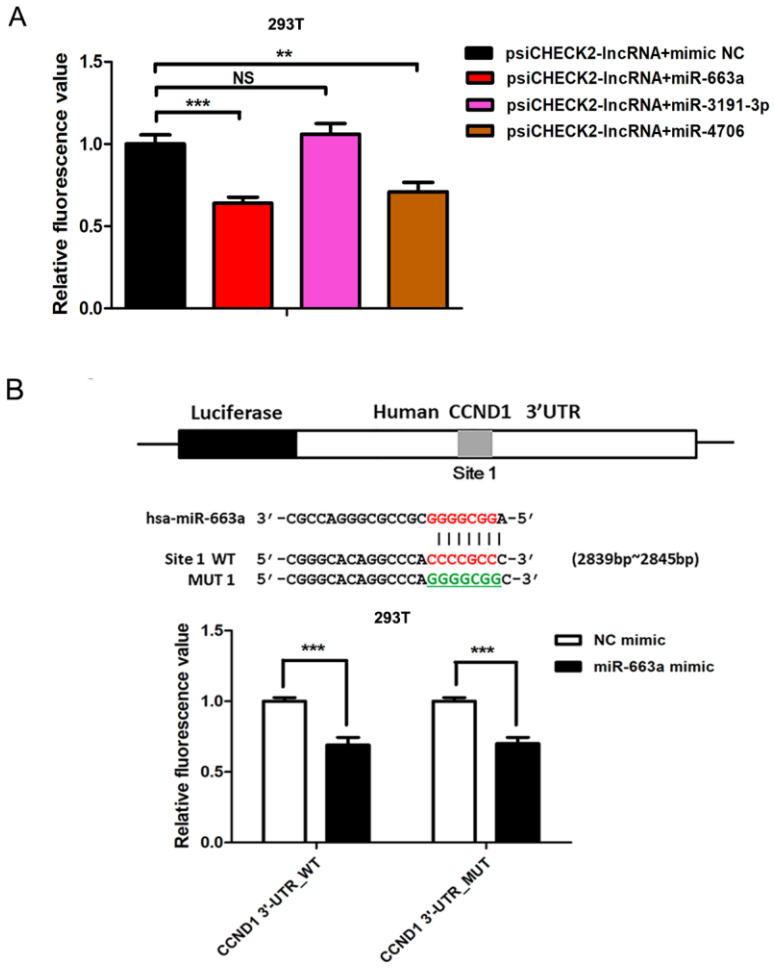
## SUPPLEMENTARY FIGURES




**Supplementary Figure 1.** (**A**) 24 h after exposure to 40 mJ/cm$^2$ UVB, ROS content (magnification, 40×) in the UVB irradiation group was increased compared with that in the control group, and NAC (10 mM) caused a reduction in UVB-induced ROS generation. (**B**) At 24 h after exposure to 40 mJ/cm$^2$ UVB, NAC had no significant effect on UVB-induced upregulation of *RP11-670E13.6.* (**C**) ROS contents were not influenced in *RP11-670E13.6*-depleted HDFs compared with that in the control group (magnification, 40×). (**D**, **E**) Activities of antioxidant enzymes SOD and CAT. CAT, catalase; NS, not significant; SOD, superoxide dismutase.




**Supplementary Figure 2.** (**A**) HDFs were transfected with *RP11-670E13.6* or control siRNA. Forty-eight hours after transfection, whole-transcriptome analysis was performed with RNA-seq. Heatmap showing the differentially expressed genes after *RP11-670E13.6* knockdown ($P < 0.05$, FC log2 > 1.5). (**B**) Top significant molecular functions for genes whose transcript levels were increased in *RP11-670E13.6*-depleted HDFs.




**Supplementary Figure 3.** (**A**) Luciferase assays showed a significant decrease in luciferase activities after cotransfection of the *RP11-670E13.6* expression vector and miRNA mimics. (**B**) Putative binding site of *miR-663a* in the 3′-UTR of *CCND1* and the sites of target mutagenesis are indicated. Luciferase activity in HDFs, demonstrating the effects of *miR-663a* on the expression of *CCND1*. *P* values were determined by Student's *t*-tests. **P* < 0.05; ***P* < 0.01; and ****P* < 0.001.