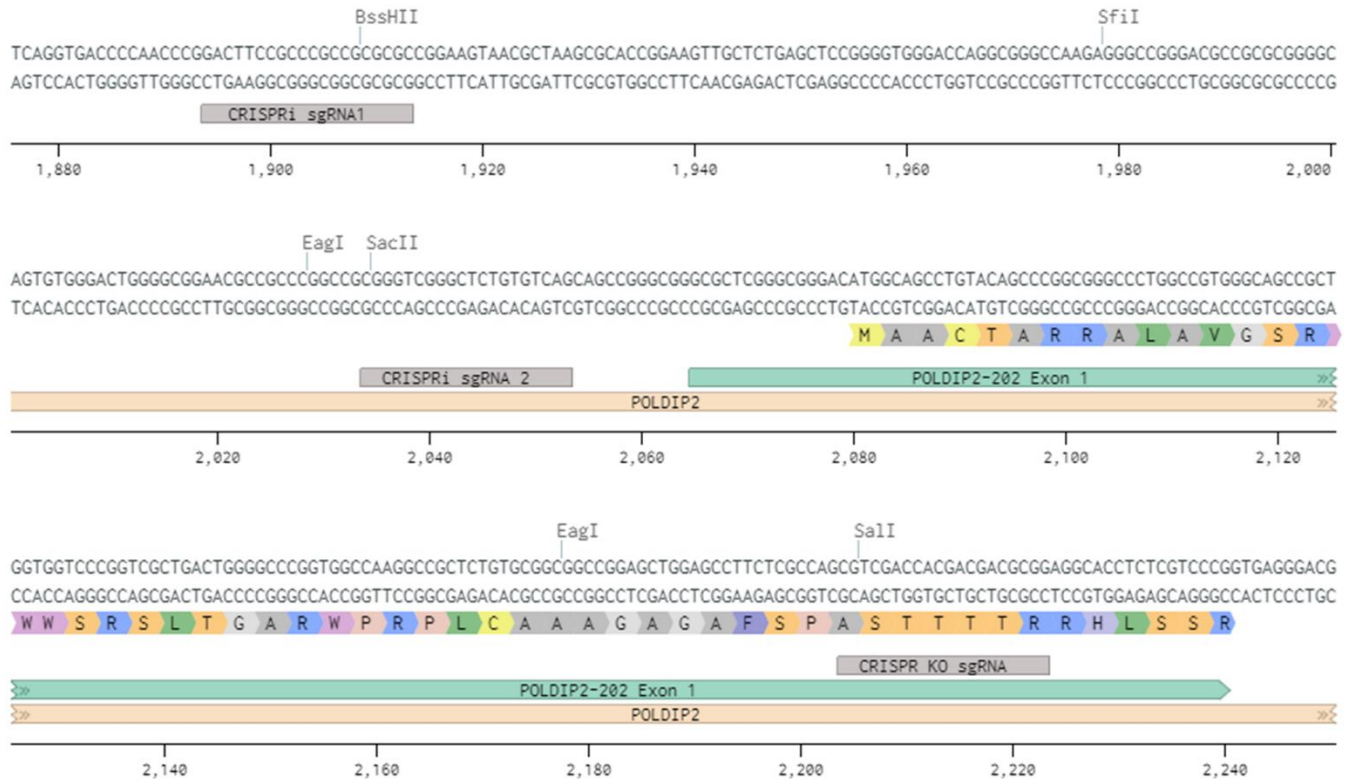
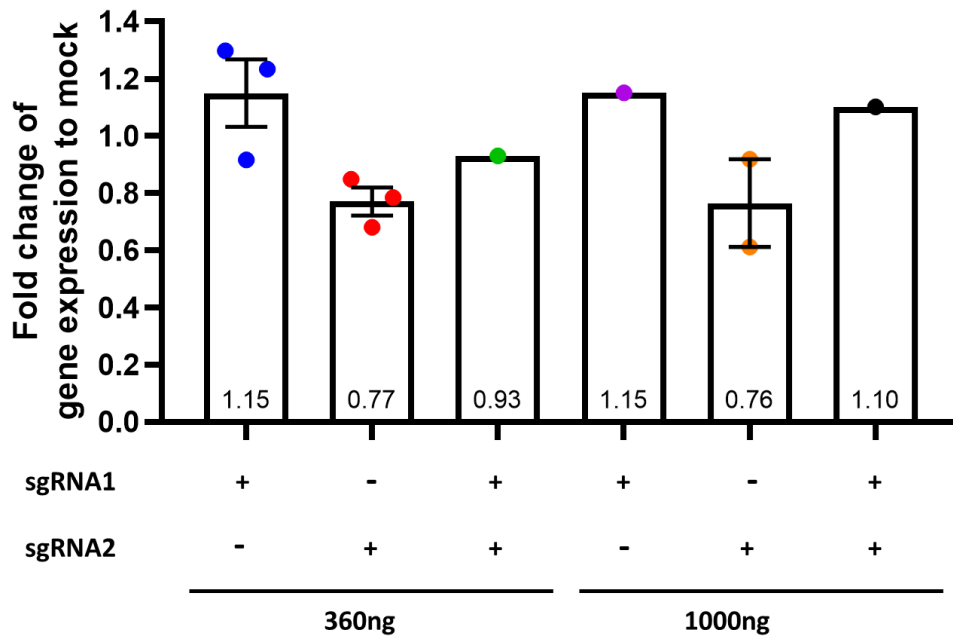


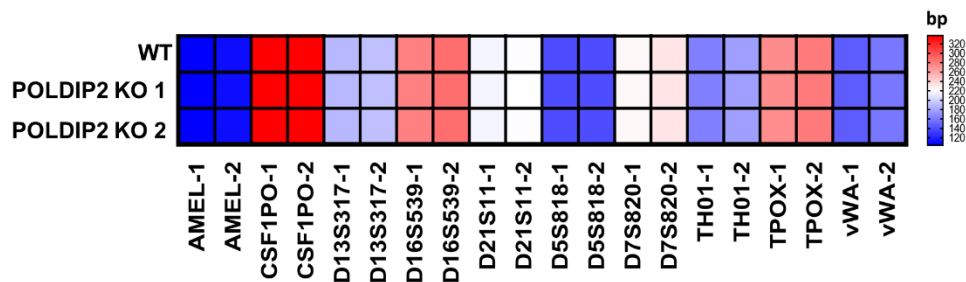
**SUPPLEMENTARY FIGURES**



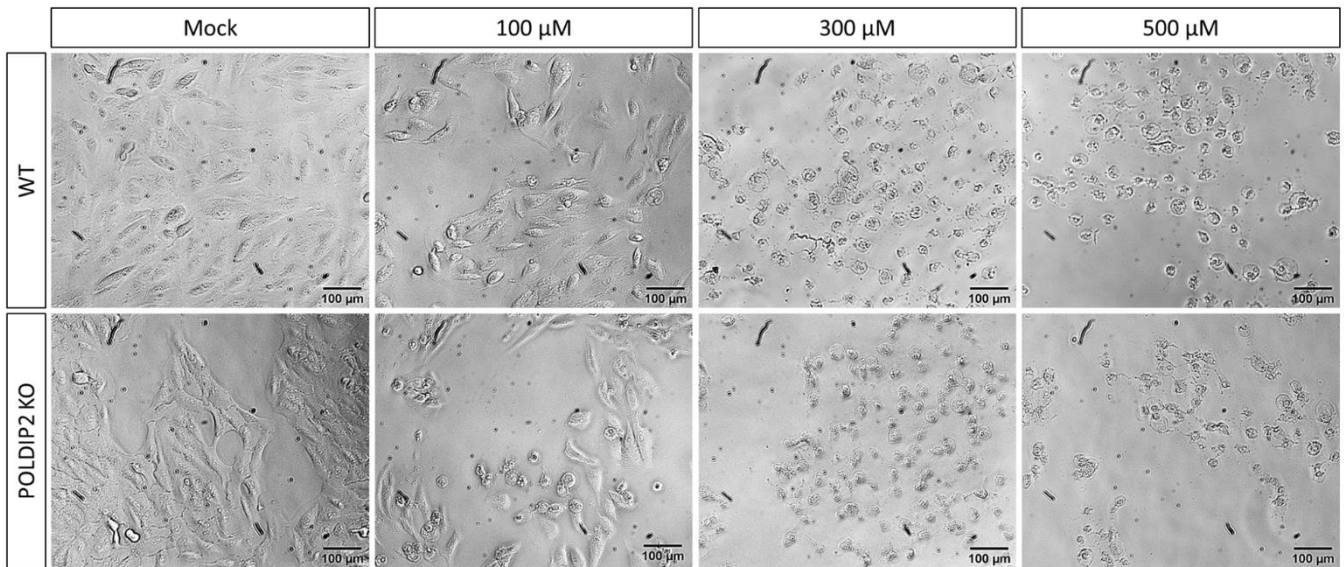
**Supplementary Figure 1. Schematic diagram of the 5' region of human *POLDIP2* gene with sgRNA target areas near the transcription start site (TSS).** CRISPRi sgRNA1 and CRISPRi sgRNA2 were used for *POLDIP2* knockdown and CRISPR KO sgRNA was used for *POLDIP2* knockout.



**Supplementary Figure 2. Testing *POLDIP2* repression in ARPE-19-KRAB cell line.** Cells were analysed using RT-qPCR 3 days after transfection with the indicated sgRNAs. Values were normalised to a ARPE-19 mock control and expressed as mean ± SEM.



**Supplementary Figure 3. Heatmap of short tandem repeat analysis of 10 polymorphic markers of WT [19] and POLDIP2 KO cell lines.** Allele 1 and 2 are designated as -1 and -2 respectively.



**Supplementary Figure 4. Representative images of WT and POLDIP2 KO cells after 3 days of tBHP treatment with various concentrations (100  $\mu$ M, 300  $\mu$ M, and 500  $\mu$ M) and control (Mock).**