

Figure S1. Effect of tBHP on cell viability in chondrocytes is concentration-dependent. \*\*\*P<0.01 vs. control. OPG, osteoprotegerin; tBHP, *tert*-butyl hydroperoxide.

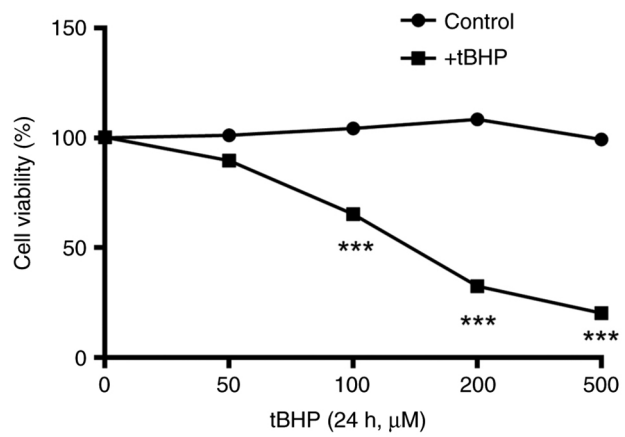


Figure S2. Effect of tBHP on cell viability in chondrocytes is time-dependent. \*\*\* $P < 0.01$  vs. control. OPG, osteoprotegerin; tBHP, *tert*-butyl hydroperoxide.

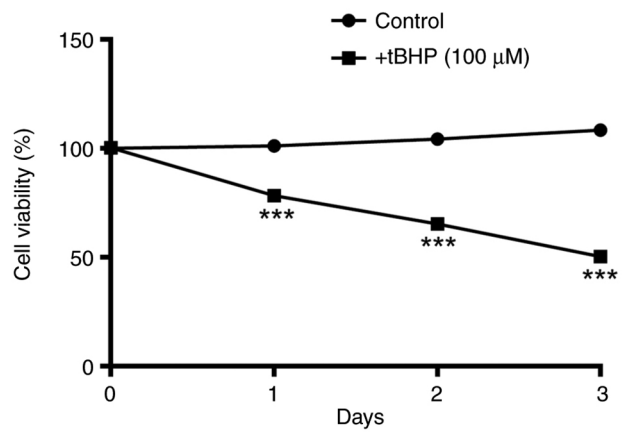


Figure S3. No difference between the blank control and negative control (pLVX-TRE3G) groups was observed in terms of the apoptosis ratio (early plus late apoptosis). NS, not significant.

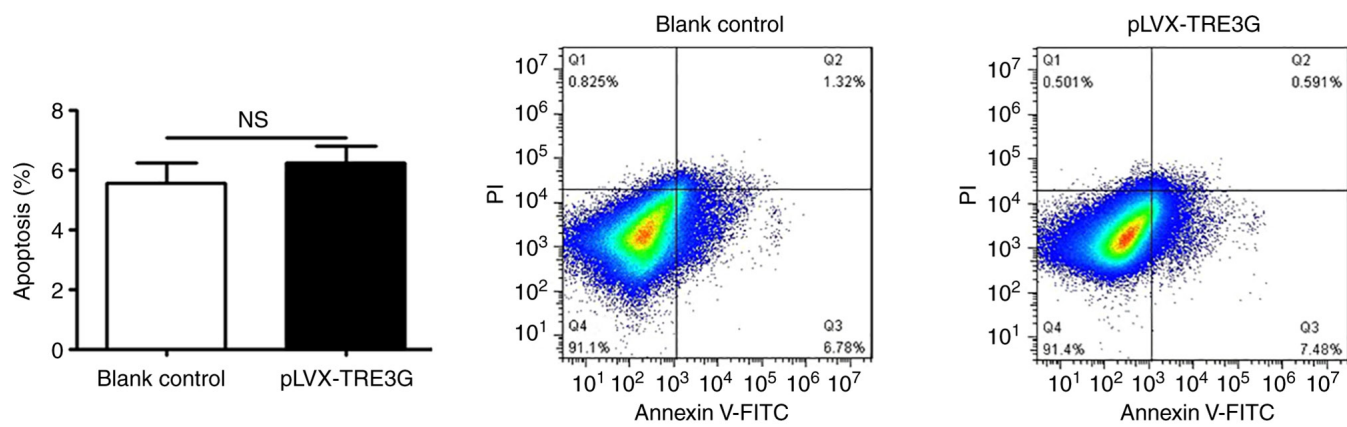


Figure S4. No difference between blank control and negative control (pLVX-TRE3G) groups was observed in terms of (A) chondrocyte viability and (B) ROS production. The representative flow cytometry plots of ROS in (C) blank control and (D) pLVX-TRE3G. NS, not significant; ROS, reactive oxygen species.

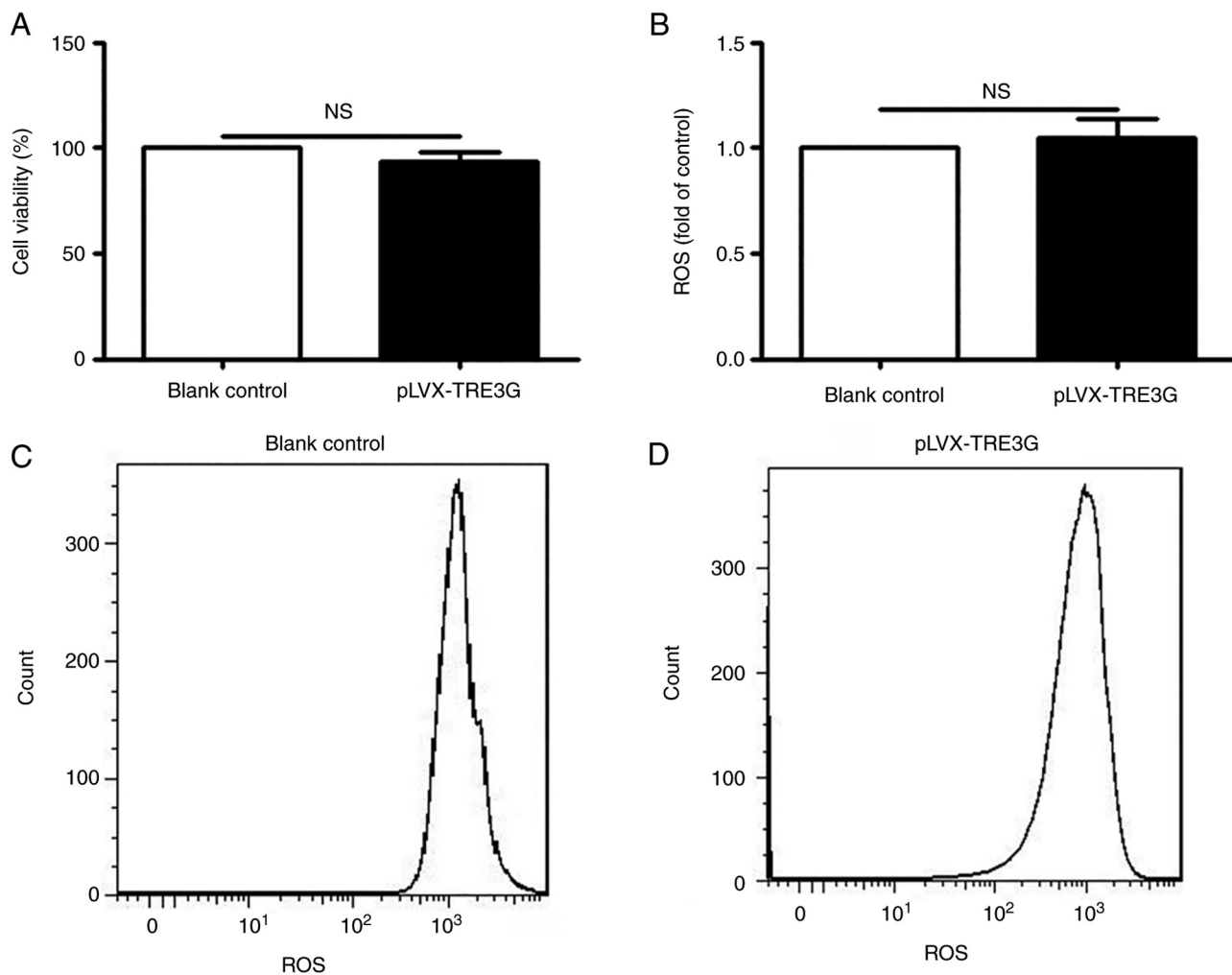


Figure S5. Representative flow cytometry plots for ROS detection. (A) Negative control (pLVX-TRE3G), (B) pLVX-TRE3G + tBHP, (C) pLVX-TRE3G-OPG and (D) pLVX-TRE3G-OPG + tBHP. OPG, osteoprotegerin; ROS, reactive oxygen species; tBHP, *tert*-butyl hydroperoxide.

