

Figure S1. PDRN-induced phosphorylation of p38 and JNK in (A) human dermal fibroblasts and (B) human epidermal keratinocytes. Cells were cultured without serum for 16 h, followed by addition of PDRN to culture medium for 0, 5, 15, 30, 50 and 120 min. Cell lysates were analyzed by western blotting using targeted protein antibodies. Phosphorylated p38 and JNK was quantified with Image J software by comparing density of total p38 and JNK. Each treatment was performed in triplicate and data are presented as the mean \pm SEM. HDF, human dermal fibroblasts; HEK, human epidermal keratinocytes; PDRN,

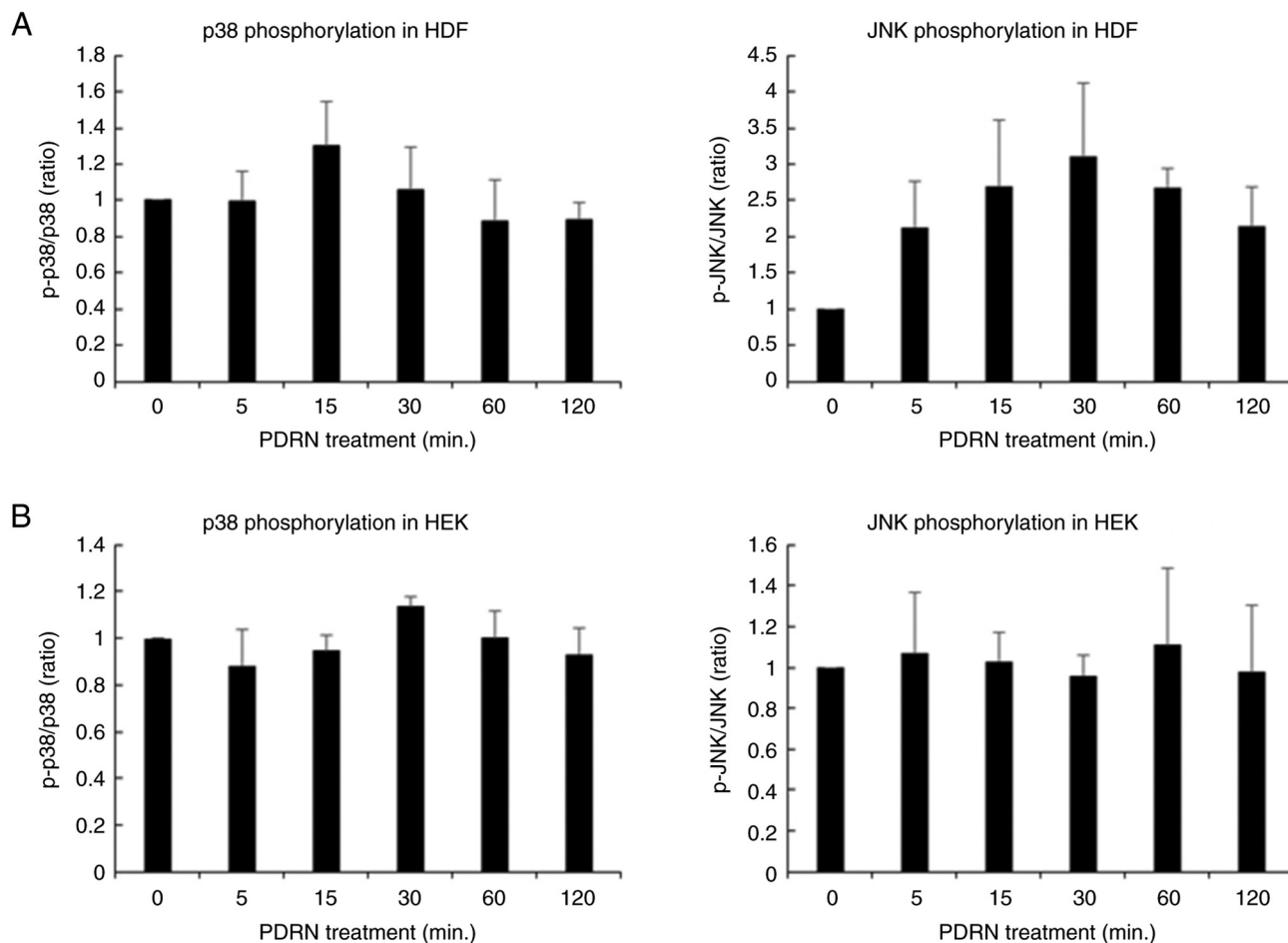


Figure S2. Decreased mRNA expression of cell cycle arrest proteins in PDRN-treated human skin cells. Cells were cultured without serum for 16 h, followed by addition of PDRN to culture medium for 24 h. mRNA expression levels of p21, p27, p53 and p57 in (A) HDF and (B) HEK were detected by reverse transcription-quantitative PCR analysis. Each treatment was performed in triplicate and the data are presented as the mean \pm SEM. * $P < 0.05$ and ** $P < 0.01$ vs. 0 $\mu\text{g/ml}$. PDRN, polydeoxyribonucleotide; HDF, human dermal fibroblasts; HEK, human epidermal keratinocytes.

