



Supplementary Figure 7. Pamidronate restores the altered phosphorylation of AKT, ERK1/2, and NF-κB p65 in bilirubin-impaired SHED under dentinogenic condition. SHED were cultured as described in Figure 5a. Expression of AKT, ERK1/2, and NF-κB p65 and their phosphoproteins p-AKT (Ser), p-AKT (Thr), p-ERK1/2, and p-NF-κB p65 after 2 weeks of the dentinogenic induction was analyzed by western blotting. (a-c) Representative western blotting images are shown. (d-f) Results were shown as the relative phosphorylated expression of p-AKT (Ser) to AKT, p-AKT (Thr) to AKT, and p-AKT (Ser) and p-AKT (Thr) [p-AKT (Ser+Thr)] to AKT (d), p-ERK1/2 to ERK1/2 (e), and p-NF-κB p65 to NF-κB p65 (f). a-f: B0, SHED treated with 0 μM bilirubin; B50, SHED treated with 50 μM bilirubin; B50+PAM, SHED treated with 50 μM bilirubin and 10 μM pamidronate. d-f: n = 5 for all groups. Statistical analysis was performed as described in the Methods. Graph bars showed the means ± SEM. **P* < 0.05, ***P* < 0.01, and ****P* < 0.005. NS, no significance. NS, no significance.