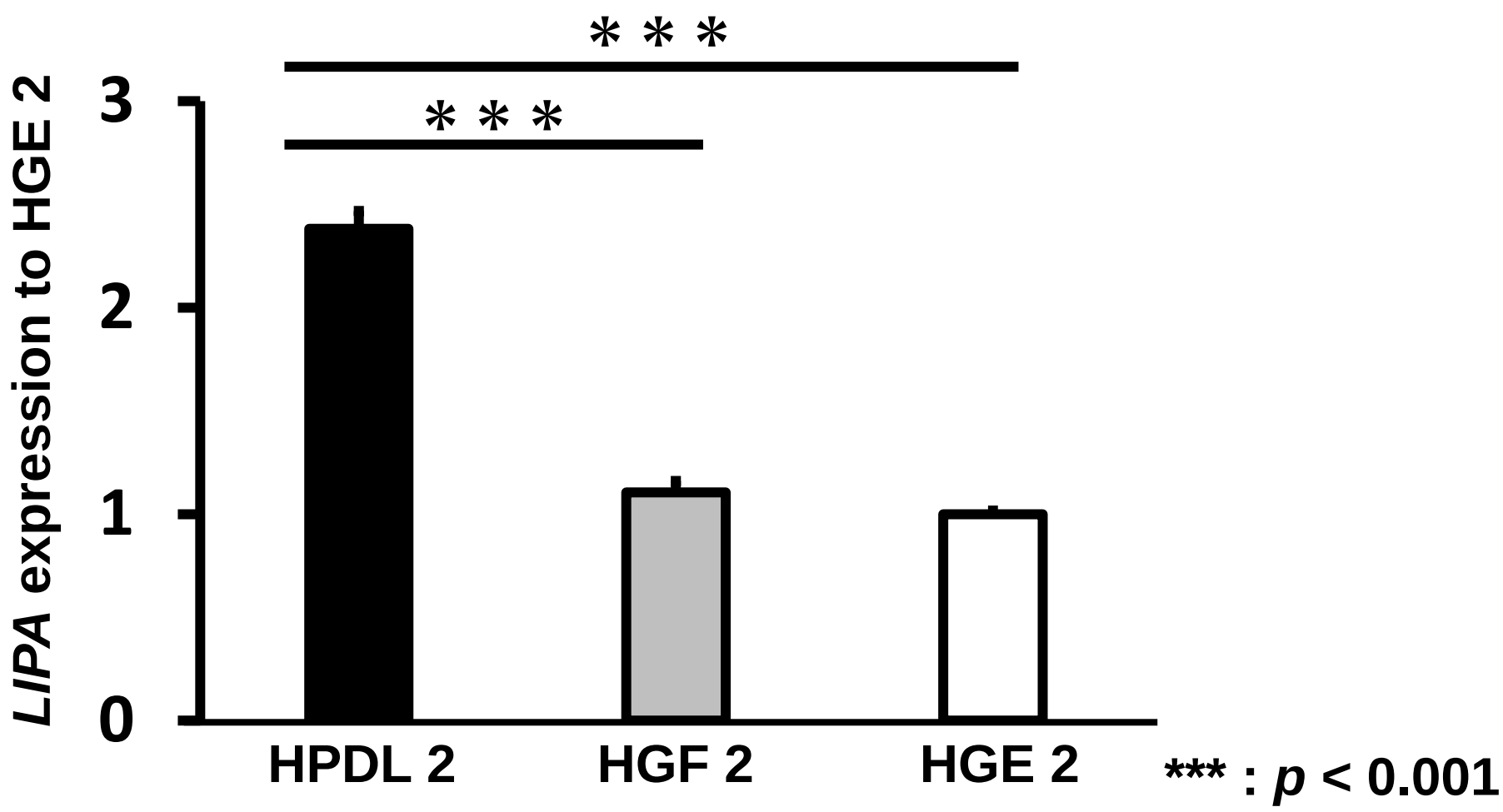
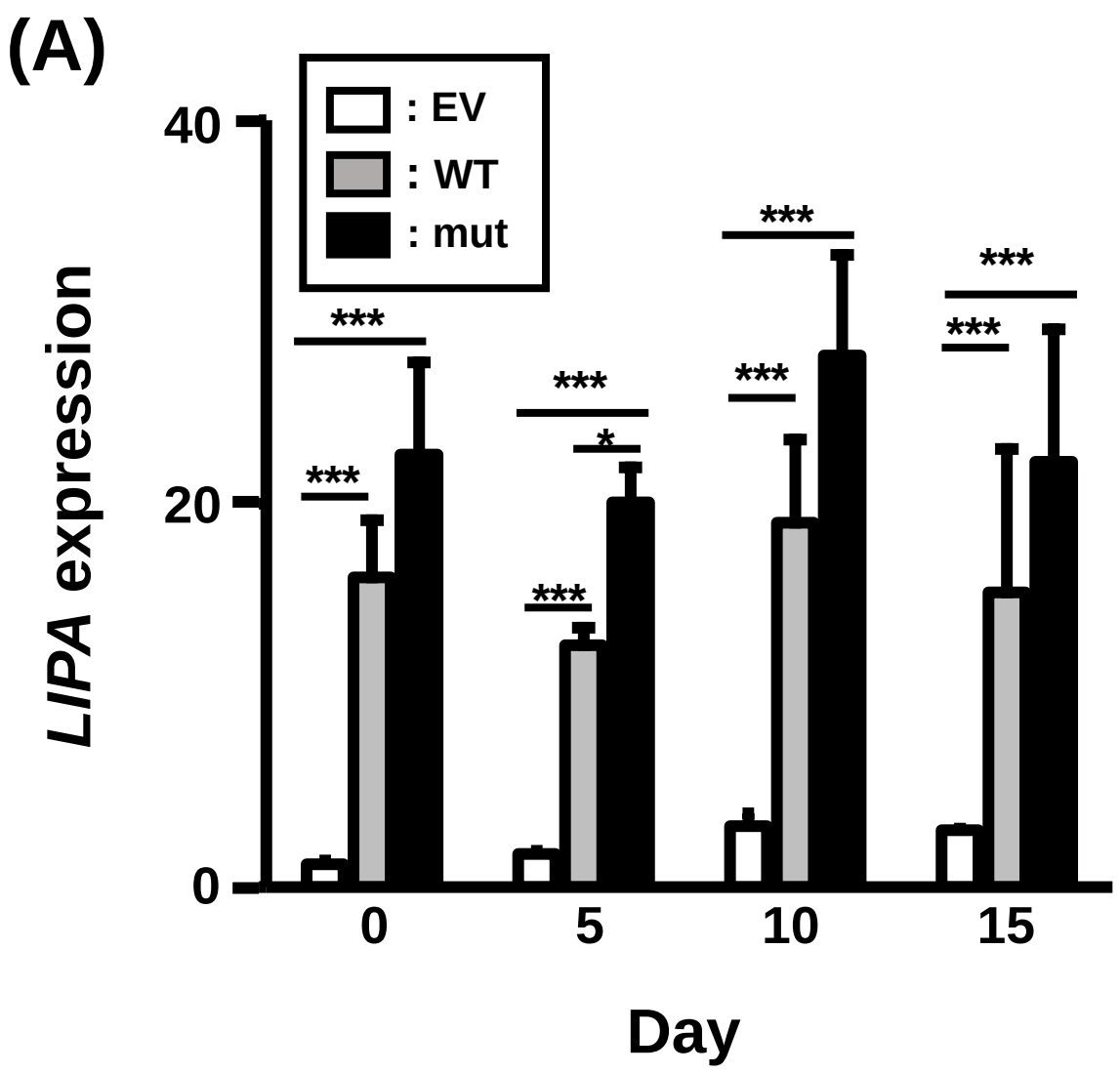
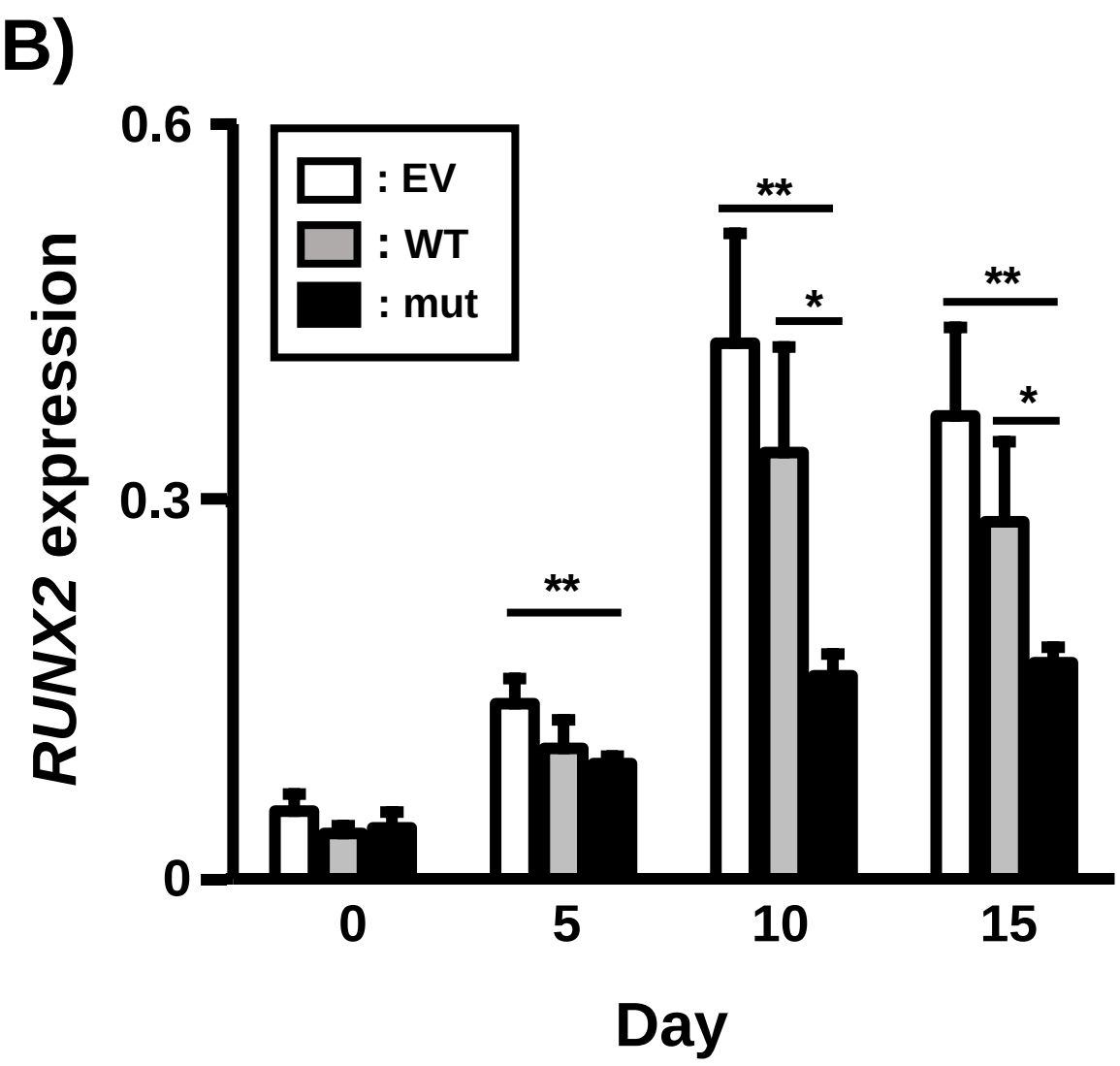
Appendices Figure 1

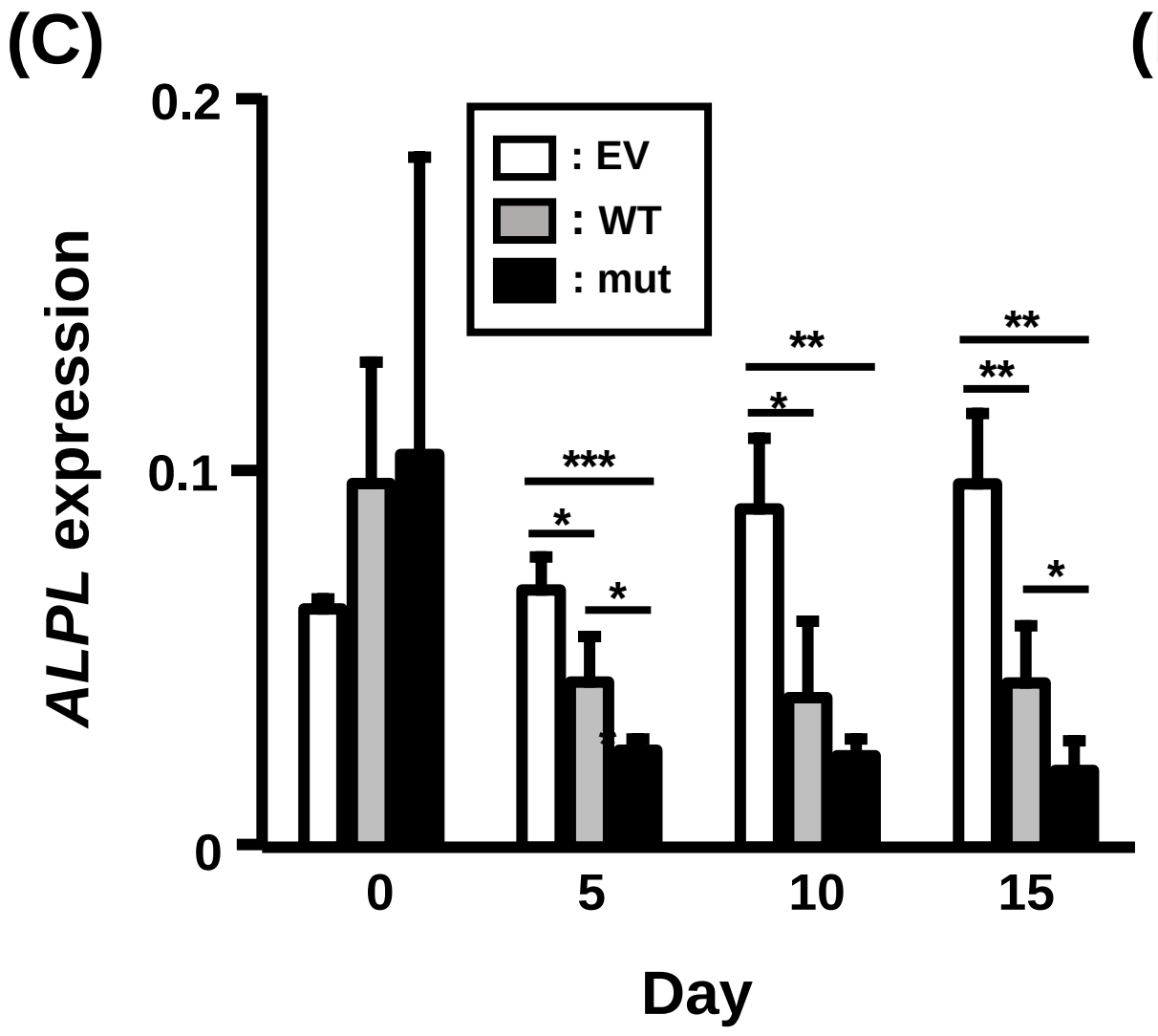


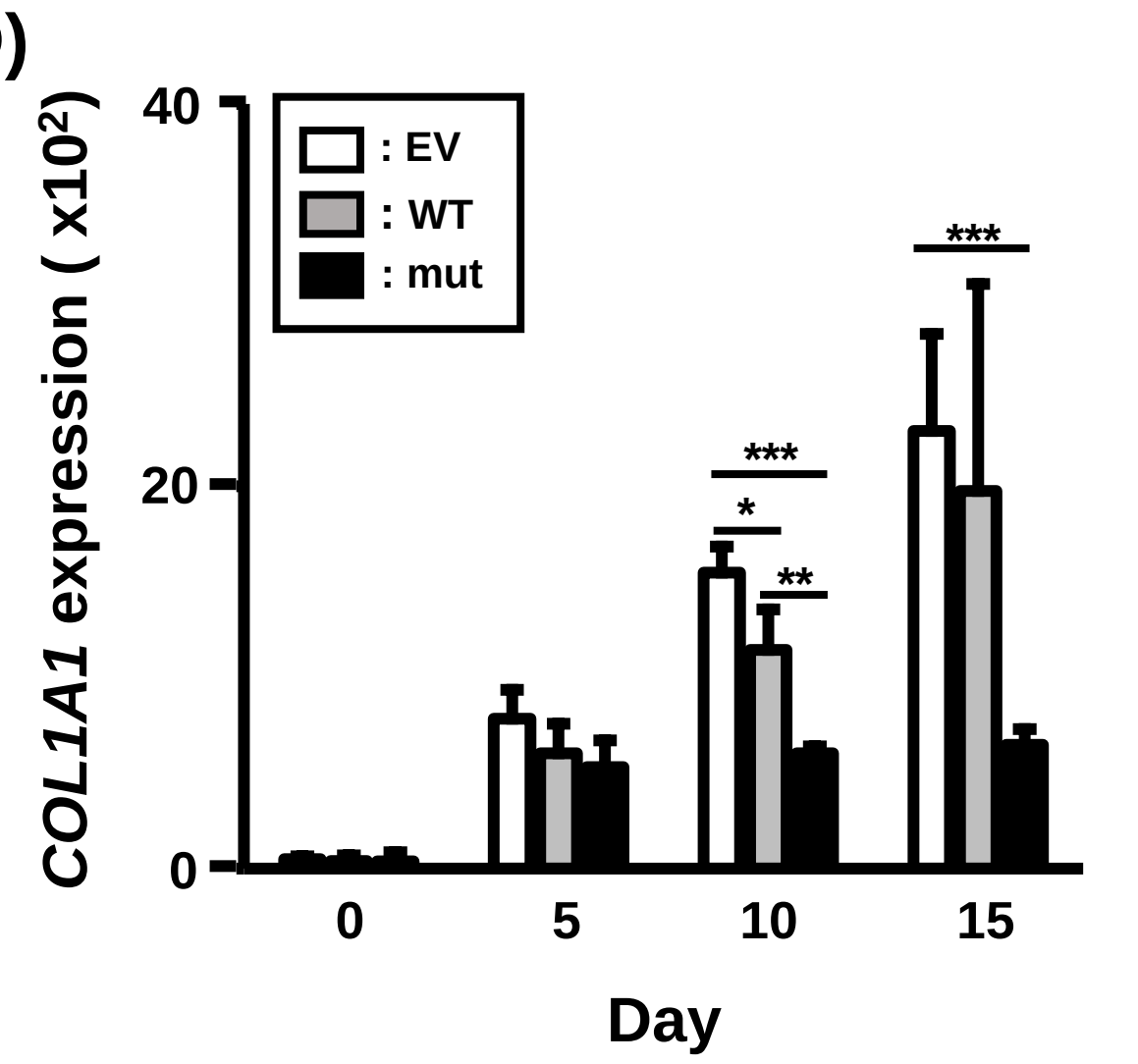
Appendices Figure 1. The mRNA expression of *LIPA* in HPDL 2, HGF 2, and HGE 2 was assessed using real-time PCR. The *LIPA* mRNA expression in HPDL 2 and HGF 2 was calculated as relative ratios to that in HGE 2. Data represent the average and standard deviation (SD) of three independent experiments.
*** $p < 0.001$

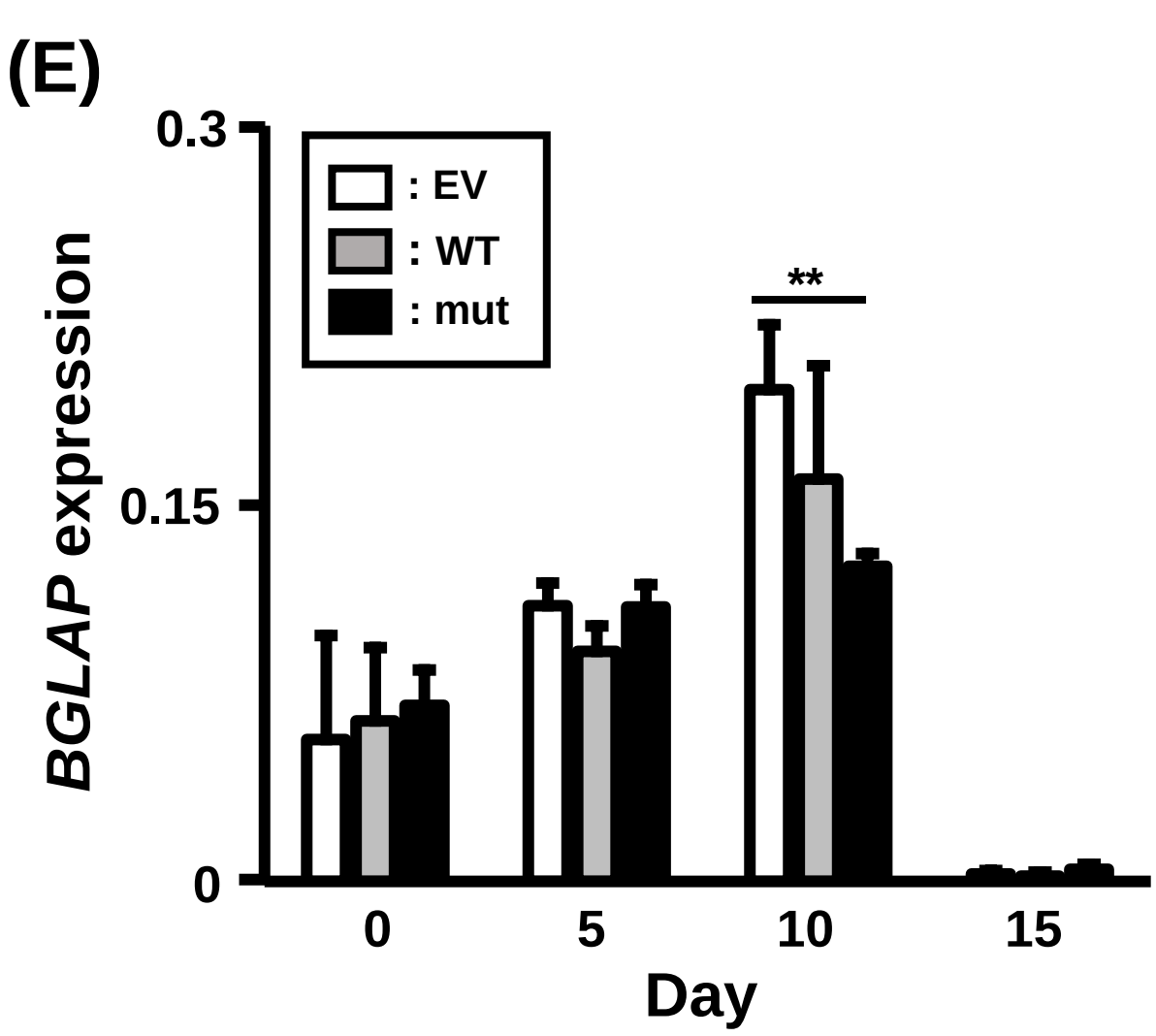
Appendices Figure 2





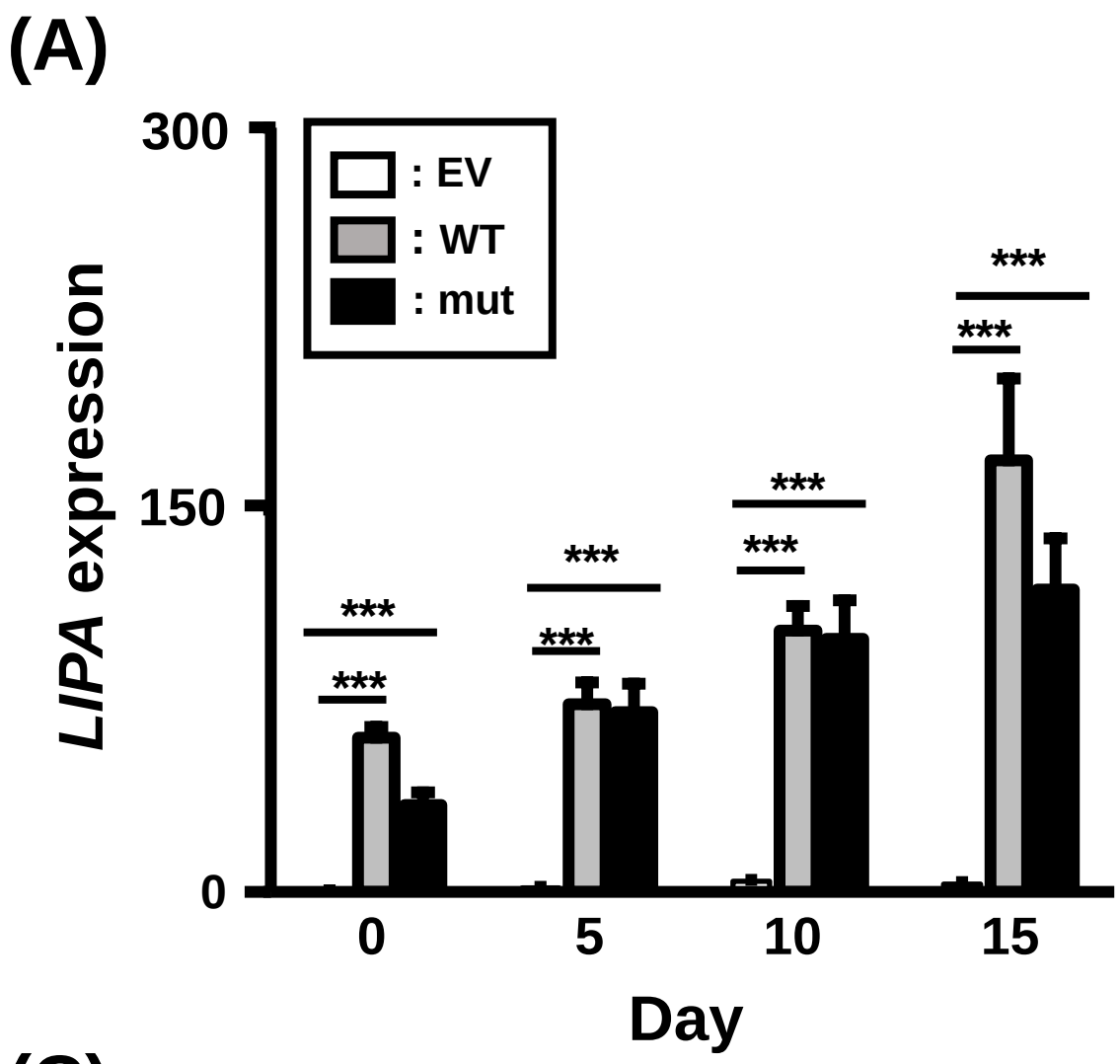


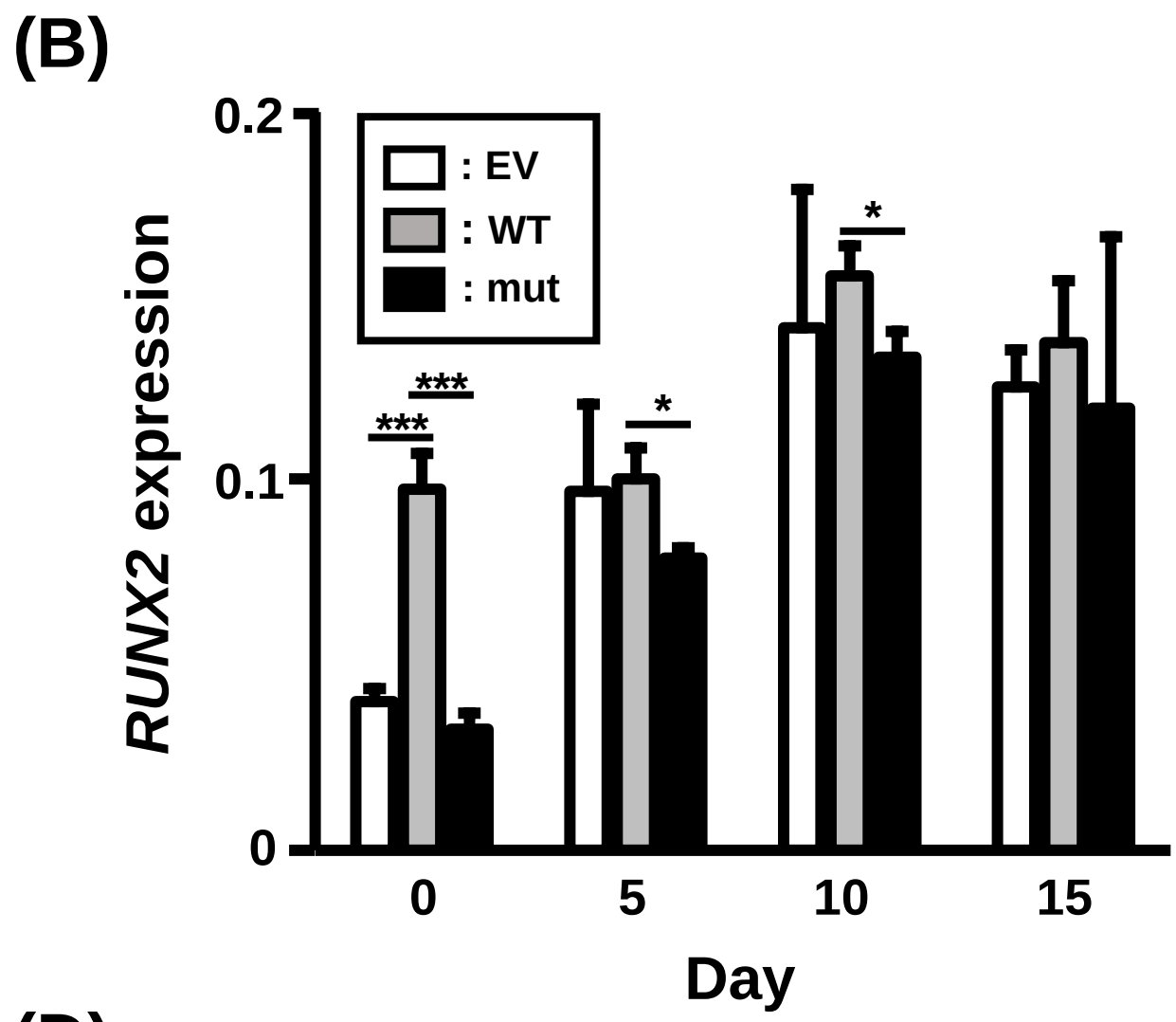


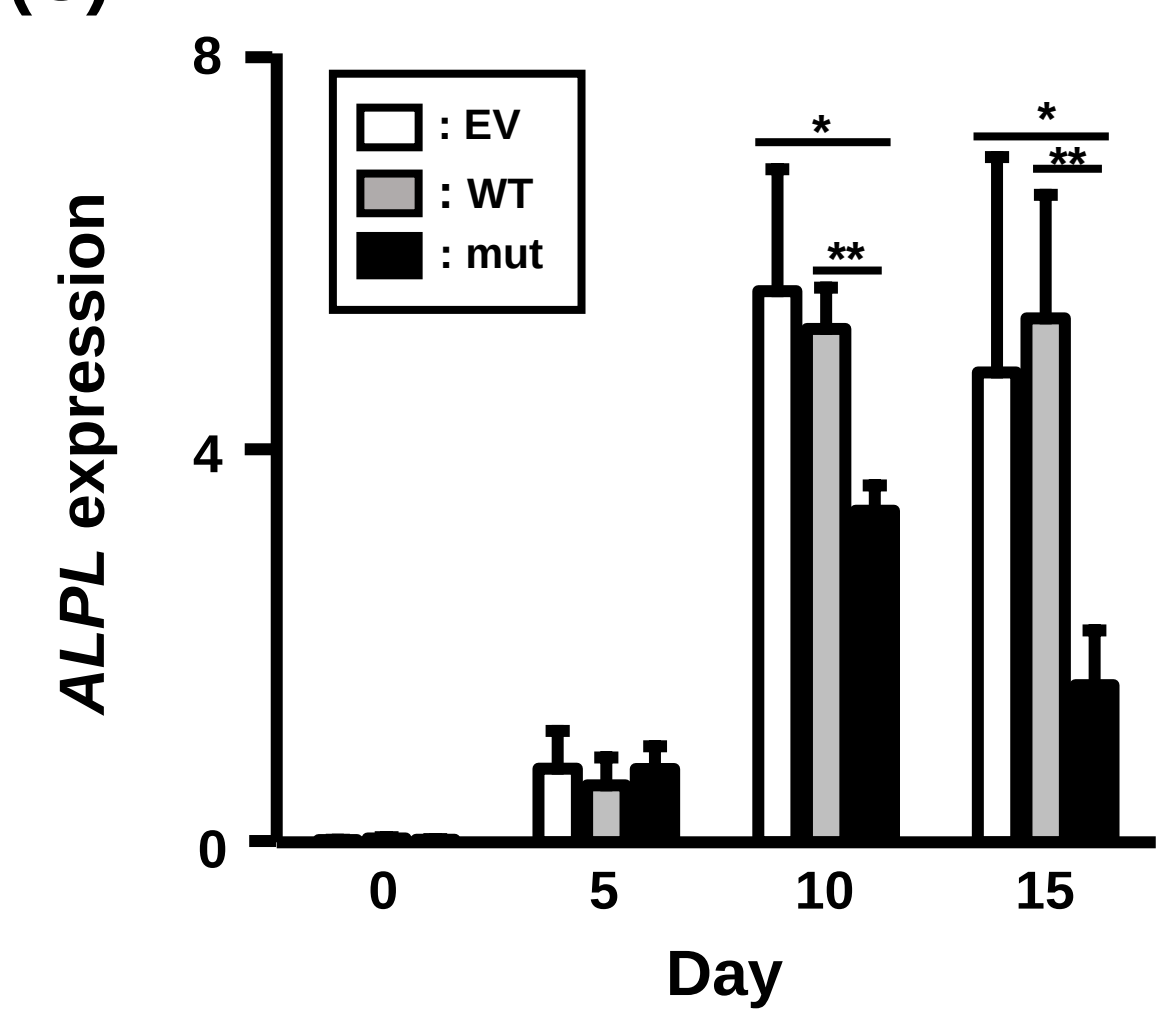


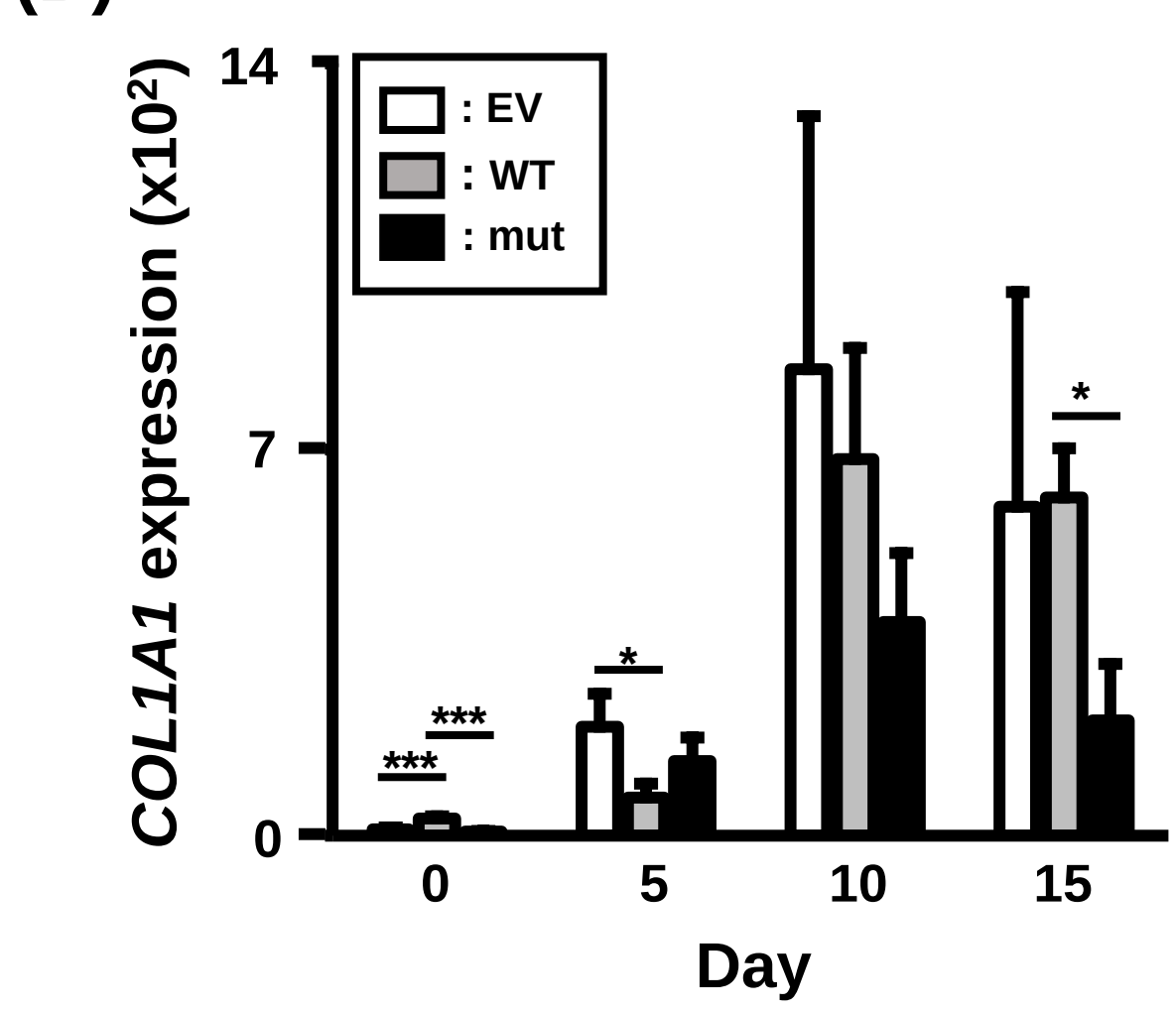
Appendices Figure 2. Effects of *LIPA* WT (WT) and *LIPA* mut (mut) on mRNA expression of the calcification-related genes during the cytodifferentiation of HPDL cells derived from donor #2. HPDL cells were cultured in the mineralization medium for 15 days. The mRNA expression levels of *LIPA* (A), *RUNX2* (B), *ALPL* (C), *COL1A1* (D), and *BGLAP* (E) were assessed using real-time PCR every 5 days. The expression level of each gene was calculated as relative ratios to the expression level of *HPRT* (an internal control gene). Data represent the average and standard deviation (SD) of three independent experiments. EV: empty vector-HPDL, WT: *LIPA* wild-type HPDL, mut: *LIPA* SNP rs143793106-HPDL. *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$

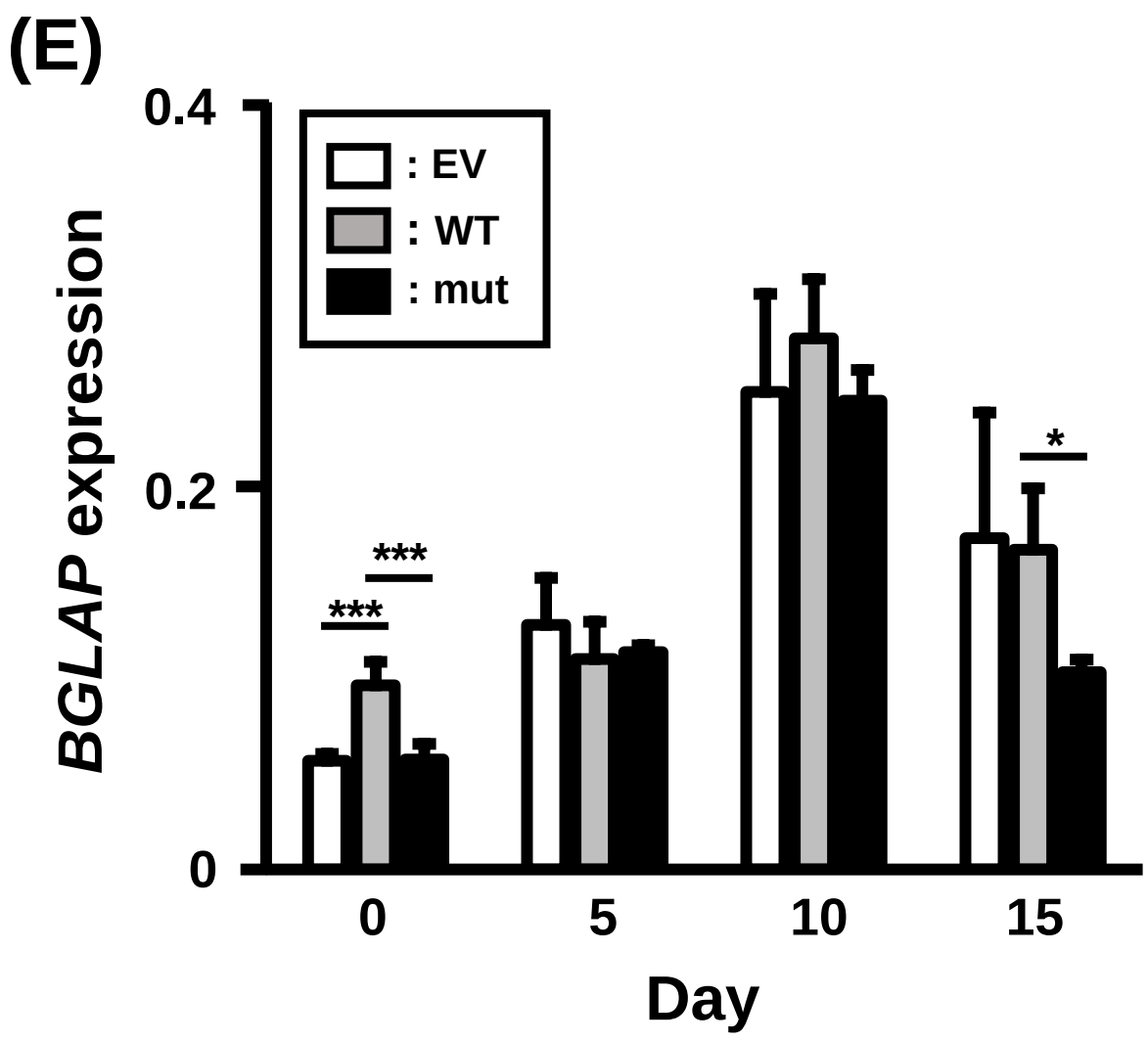
Appendices Figure 3











Appendices Figure 3. Effects of *LIPA* WT (WT) and *LIPA* mut (mut) on mRNA expression of the calcification-related genes during the cytodifferentiation of HPDL cells derived from donor #3. HPDL cells were cultured in the mineralization medium for 15 days. The mRNA expression levels of *LIPA* (A), *RUNX2* (B), *ALPL* (C), *COL1A1* (D), and *BGLAP* (E) were assessed using real-time PCR every 5 days. The expression level of each gene was calculated as relative ratios to the expression level of *HPRT* (an internal control gene). Data represent the average and standard deviation (SD) of three independent experiments. EV: empty vector-HPDL, WT: *LIPA* wild-type HPDL, mut: *LIPA* SNP rs143793106-HPDL. *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$