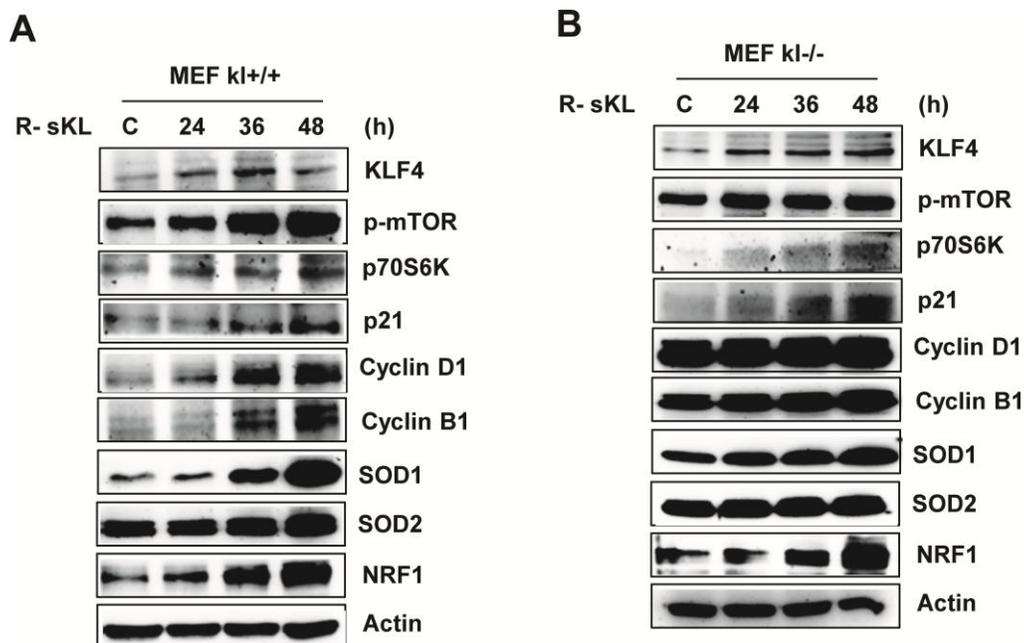
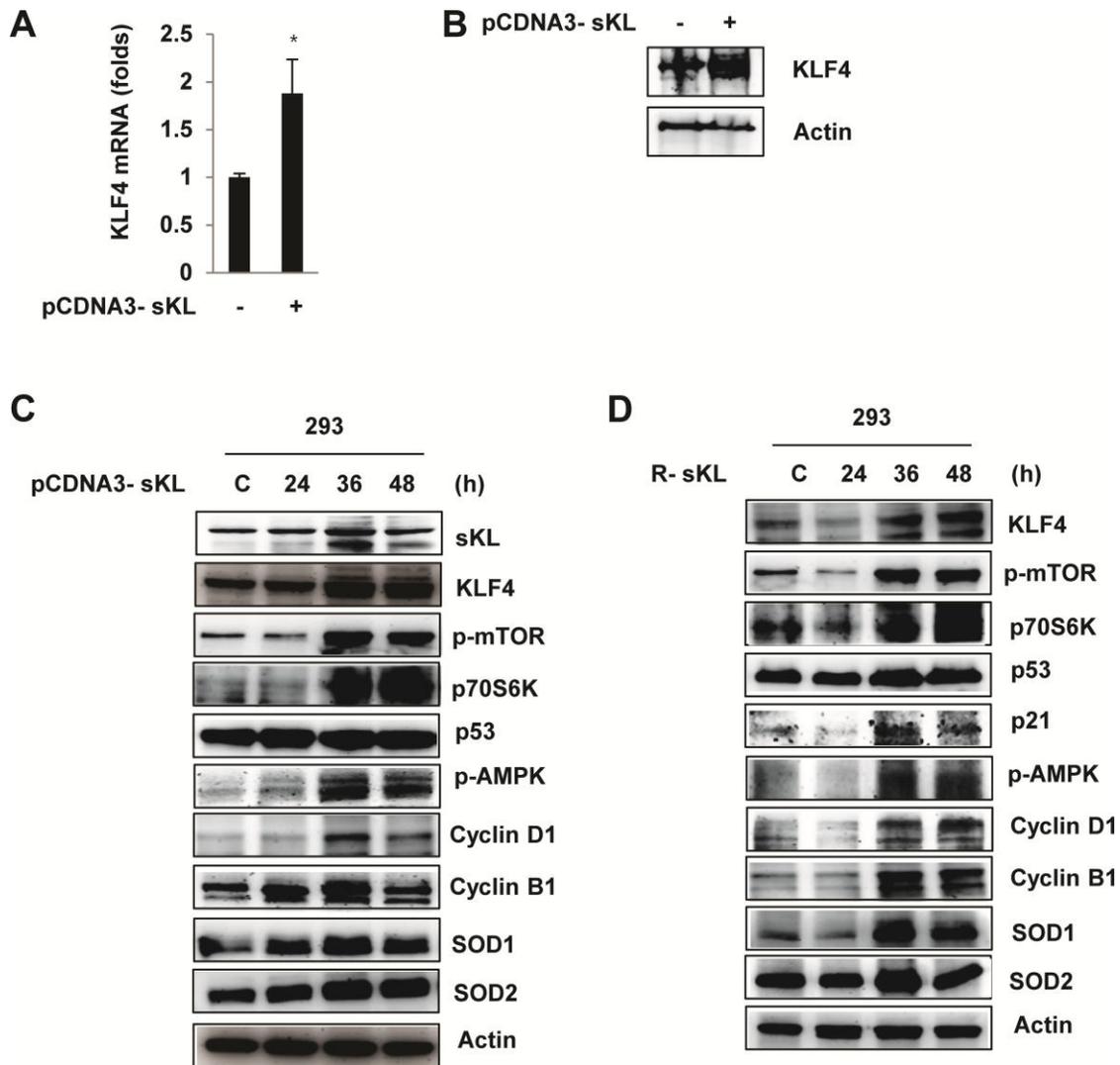


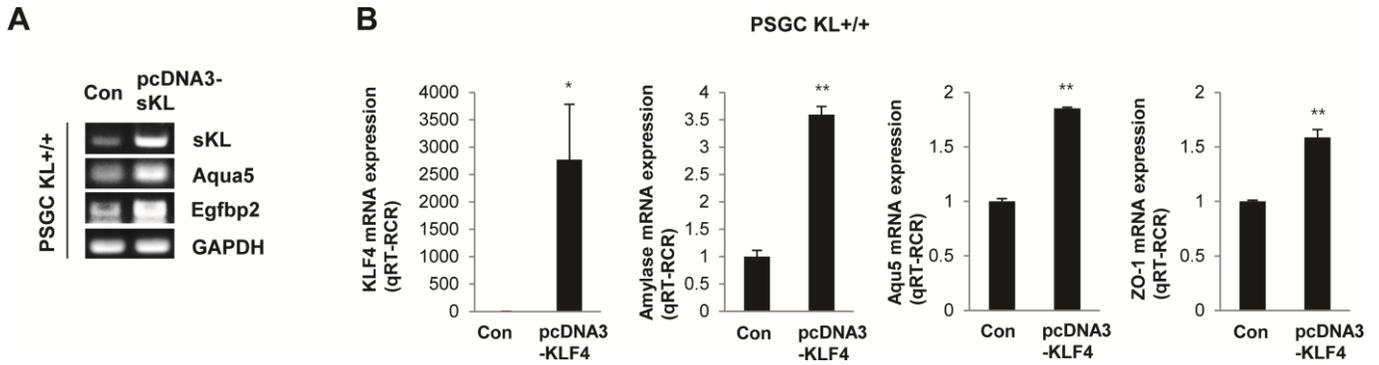
## SUPPLEMENTARY FIGURES



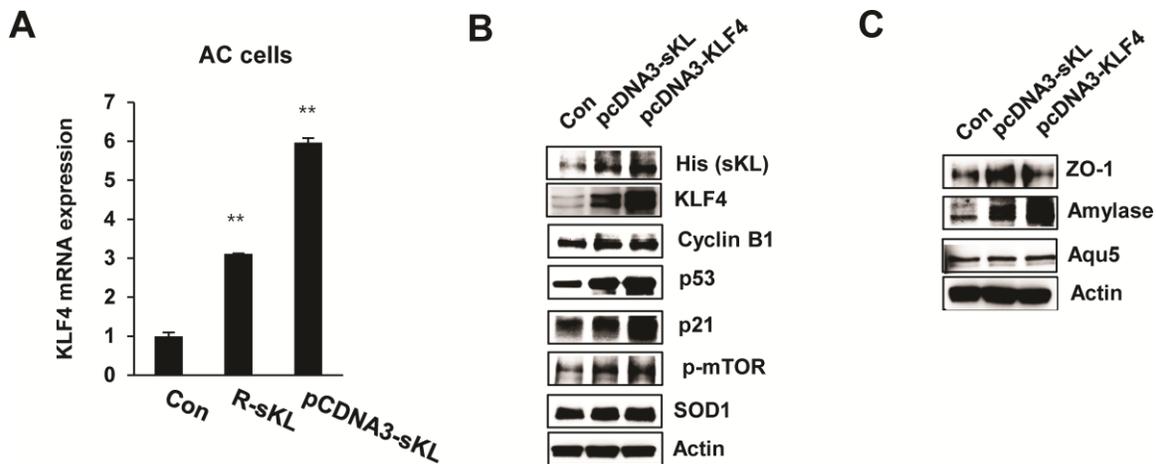
**Supplementary Figure 1. Effects of soluble klotho protein on the expression of proteins belonging to the KLF4 pathway in wild-type and klotho (-/-) MEFs.** (A, B) The expression of proteins related to the KLF4 pathway. Wild-type and klotho (-/-) MEFs were treated with soluble klotho protein (0.3  $\mu$ g) at the indicated times. Western blot analysis was performed to assess the KLF4, mTOR, p70S6K, p21, NRF2, cyclin D1, cyclin B1, SOD1, and SOD2 levels.



**Supplementary Figure 2. The expression of KLF4 in HEK293 cells.** (A) qRT-PCR analysis of KLF4 in soluble klotho-expressing HEK293 cells. (B) Total protein samples were prepared in soluble klotho-transfected HEK293 cells, followed by Western blot analysis to examine the expression levels of KLF4. (C, D) Western blot analysis was performed to assess the KLF4- and KLF4-related protein levels in soluble klotho-transfected or soluble klotho protein-treated cells.



**Supplementary Figure 3. The expression of salivary gland functional proteins induced by KLF4 in primary salivary gland cells (PSGCs).** The mRNA expression of functional proteins (aquaporin 5, EGFBP2, ZO-1 and amylase) in KLF4-overexpressing KL(+/+) PSGCs as determined by RT-PCR (A) and qRT-PCR analyses (B).



**Supplementary Figure 4. The expression of salivary gland functional proteins in acinar cells (ACs).** (A) qRT-PCR analysis of KLF4 mRNA in soluble klotho- or KLF4-transfected ACs. (B) The expression of proteins related to the KLF4 pathway. (C) The mRNA expression of functional proteins (aquaporin 5, EGFBP2, ZO-1 and amylase) in soluble klotho- or KLF4-overexpressing ACs as determined by Western blot.