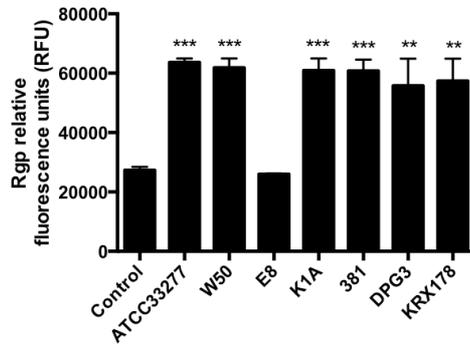


Fig. S1

A



B

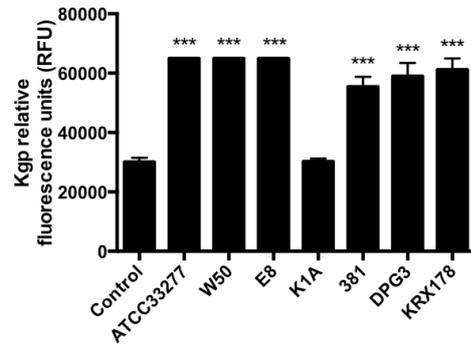


Fig. S1. Release of gingipain from different strains of *P. gingivalis*. Different strains of *P. gingivalis* were washed with KRG buffer and then suspended in cell culture medium at a concentration of 10^6 CFU. The relative concentration of Rgp (A) or Kgp (B) gingipains produced by different strains of *P. gingivalis* were determined by using gingipain arginine and lysine substrate, respectively. The cell culture medium with KRG buffer was served as control. **, $p < 0.005$; ***, $p < 0.0001$. $n = 3$.

Fig. S2

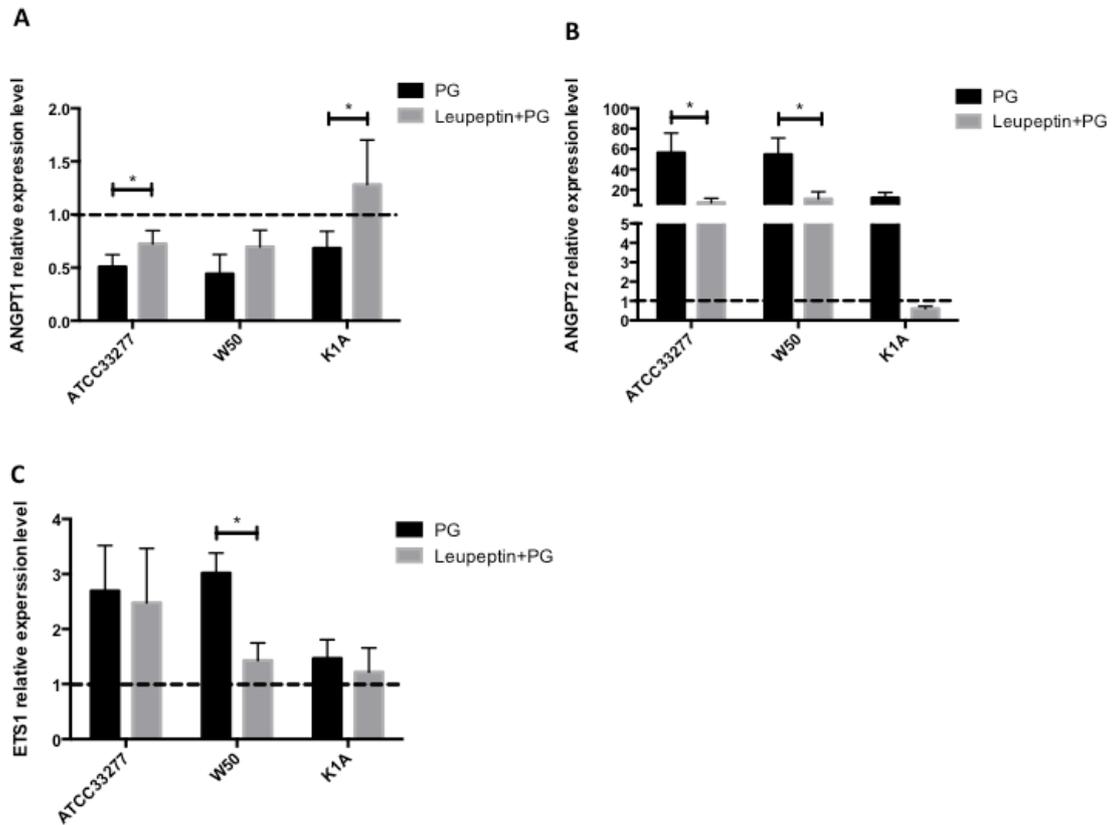


Fig. S2. Leupeptin inhibits *P. gingivalis* regulation of Angpt1, Angpt2, and ETS1 in AoSMCs. Before stimulating the cells, *P. gingivalis* ATCC 33277, W50, and K1A were incubated with or without 1mM of Leupeptin for 1h. Quantitative real-time PCR results demonstrate relative transcription for Angpt1 (A), Angpt2 (B), and ETS1 (C) of AoSMCs stimulated with 10 MOI of wild type *P. gingivalis* (ATCC 33077, W50), and Kgp mutant (K1A) for 24 h. All these results were normalized to the gene expression level of the housekeeping gene GAPDH. *, $p < 0.05$. A-C, $n = 4-5$.

Fig. S3

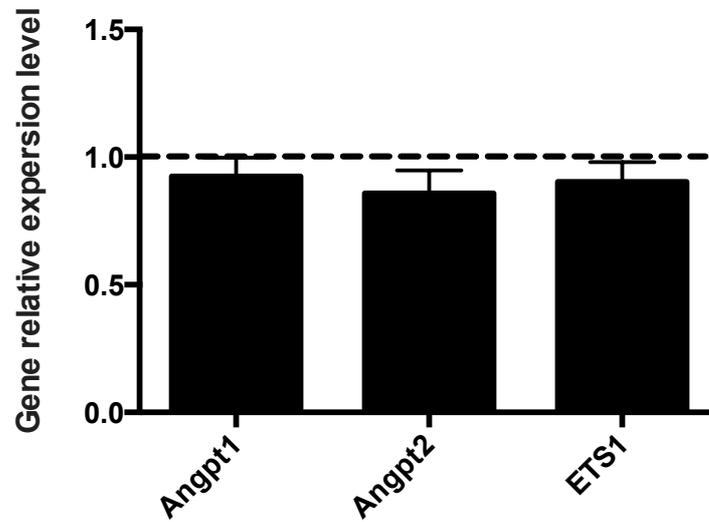


Fig. S3. *F. alocis* regulates Angpt1, Angpt2, and ETS1 gene expression in AoSMCs. Quantitative real-time PCR results demonstrate relative transcription for Angpt1, Angpt2, and ETS1 of AoSMCs stimulated with 10 MOI of *F. alocis* for 24 h. All these results were normalized to the gene expression level of the housekeeping gene GAPDH. n=5-7.

Fig. S4

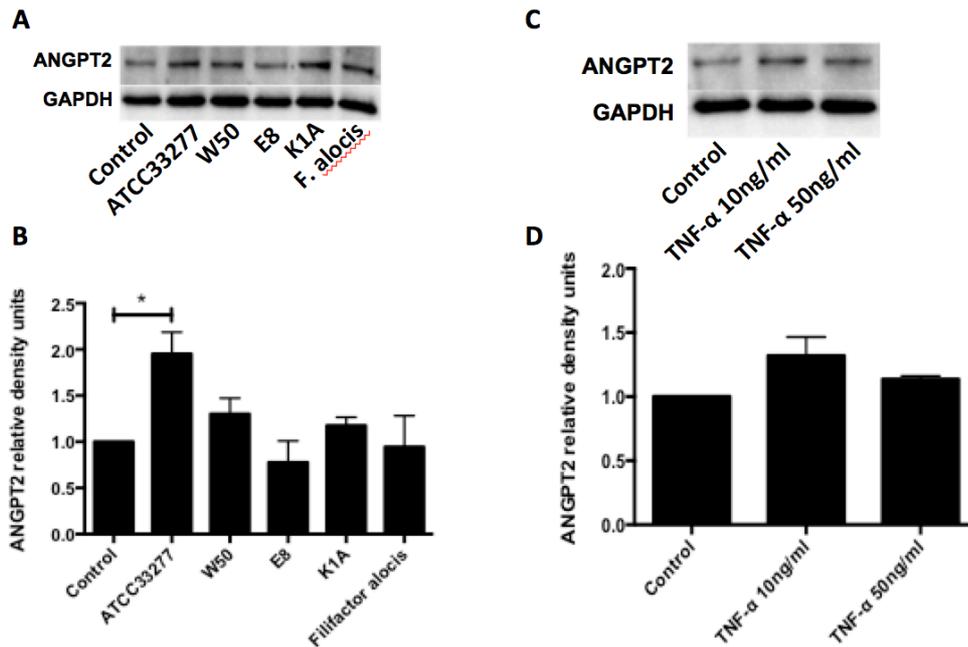


Fig. S4. *P. gingivalis* and TNF regulation of Angpt2 in AoSMCs after 24 h. Representative western blot showing Angpt2 protein expression levels of AoSMCs exposed to different *P. gingivalis* strains, *F. alocis* (A) at 10 MOI or TNF (C) at 10 ng/ml or 50 ng/ml for 24 h. Quantification of Angpt2 protein expression levels by densitometry is shown in (B) for *P. gingivalis* and *F. alocis* and in (D) for TNF. Angpt2 density signals were normalized to GAPDH signal values. *, $p < 0.05$; **, $p < 0.005$; ***, $p < 0.0001$. A, B, $n = 4$; C-D, $n = 3$.

Fig. S5

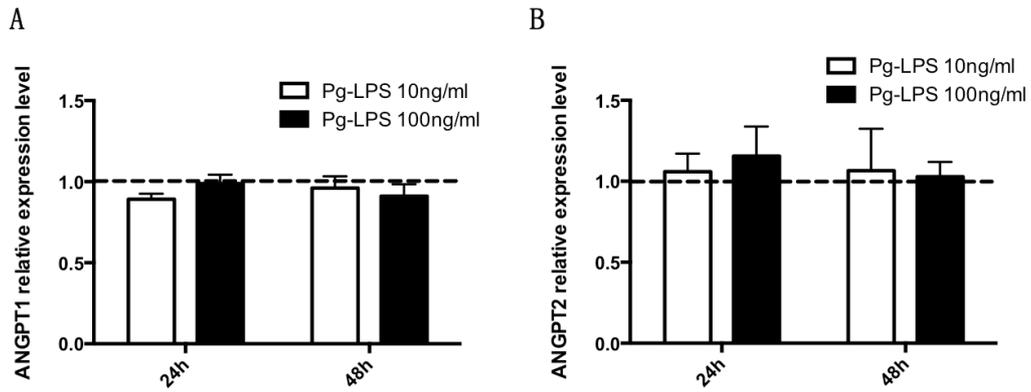


Fig. S5. LPS is not involved in *P. gingivalis* mediated regulation of Angpt1 and Angpt2 production in AoSMCs. The Angpt1 and Angpt2 gene expression level of AoSMCs stimulated with 10 ng/ml or 100 ng/ml of *P. gingivalis* LPS for 24 h or 48 h are shown in (A) and (B). All these results were normalized to the gene expression level of the housekeeping gene GAPDH. n=4.