Table S1. Bacterial strains or plasmids used in this study

Strain or plasmid	Description	Source or reference
Strains		
P. gingivalis		
33277	Wild type parental strain from ATCC	Lab stock
Δ*cdhR*	*cdhR::ermF* ($CdhR^- Em^r$)	(Wu *et al.*, 2009)
CΔ*cdhR*	*cdhR::ermF* pT1373 ($CdhR^+ Em^r Tc^r$)	This study
Δ*ltp1*	*ltp1::ermF* ($Ltp1^- Em^r$)	(Simionato *et al.*, 2006)
Δ*luxS*	*luxS::ermF* ($LuxS^- Em^r$)	(James *et al.*, 2006)
SMF1	*mfa::ermF* ($Mfa^- Em^r$)	(Park *et al.*, 2005)
S. gordonii		
DL1	Wild type	Lab stock
S. cristatus		
CC5A	Wild type	Lab stock
E. coli		
J53	K12 F^- met^- pro^-	
TOP10	F^- mcrA Δ(mrr-hsdRMS-mcrBC) φ80lacZΔM15 ΔlacX74 nupG recA1 araD139 Δ(ara-leu)7697 galE15 galK16 rpsL(Str^R) endA1 λ^-	Invitrogen
BL21 (DE3)	F^- ompT gal dcm lon $hsdS_B(r_B^- m_B^-)$ λ(DE3 [lacI lacUV5-T7 gene 1 ind1 sam7 nin5])	Novagen

Plasmids		
pTCOW	Circular shuttle plasmid derived from pVAL1, Tet^r	(Gardner *et al.*, 1996)
pT1373	*cdhR* in pTCOW	This study
pET30b	Circlular plasmid carrying an N-terminal His tag/thrombin/enterokinase configuration plus an optional C-terminal His tag sequence, Km^r	Novagen
pCR4-TOPO	Linearized plasmid with single 3' deoxyribosylthymine residues, Km^r Am^r	Invitrogen
pET30b-1373	*cdhR* in pET30b	This study

Table S2. Primers for PCR

Name	Sequence
1372-3f	5’-GCTAGCTTGCTTTAAGTTAGTTGGATTCATTAA-3’
1372-3r	5’-GCGGCGTCCTCATCGATCTCACCGCTCGGCCG-3’
1372f	5’-GCTAAGTGACTTGATATGCGAGAATTACGA-3’
1371f	5’-TAAAATTCGCTGCAAAAGTATGGATTATTC-3’
1373r	5’-GCTCTTCGGCAATCTCTTTG-3’
MFAf	5’- TGCGGCGAAGTCGTAATG-3’
MFAr	5’-ATCTTCAGCACTCTCACAAG-3’
LUXf	5’-GAATGAAAGAGCCCAATCG-3’
LUXr	5’-GTAATGGCCTCGCATCAG-3’
LTPf	5’-TTCAGCAGTAGCGGTATTCACG-3’
LTPr	5’-TGCGGATAGGGAGGAGTTGTC-3’
CDHf	5’-AAGACCTTGGAGCCTGAAGAG-3’
CDHr	5’- TCATGATGGCATAGATGGTCA-3’
16Sf	5’-AGGAACTCCGATTGCGAAGG-3’
16Sr	5’-TCGTTTACTGCGTGGACTACC-3’
CDHO	5’-TTCGTAGCTCATGTGCTTGCGTA-3’
CDHI	5’-GACAGATCTGACAAGACAGTCTCGGA-3’
RDCf	5’-CAGTCGATATCCATGAATATCATCACACTCAAGG-3’
RCDr	5’-CAGTCAAGCTTTTAGTGGGCGATTTCGTCGA-3’
EMFf	5’-TACAAGCTGTTCAGGTGAAGT-3’
EMFr	5’-AAGCCAAATGTTTAAAAGGATTAA-3’
ELUf	5’-AGTCCGGTACAATACCGACTCTTTCT-3’
ELUr	5’-TGCTGTACGGCTTCTATTCTTCGATC-3’
FETf	5`-ACTCGCCACATCGCATCGTTTCGC-3`
FETr	5`-CTCTGTTCTTAAATTAATTTGTGA-3`

References

Gardner, R.G., Russell, J.B., Wilson, D.B., Wang, G.R., and Shoemaker, N.B. (1996) Use of a modified *Bacteroides-Prevotella* shuttle vector to transfer a reconstructed beta-1,4-D-endoglucanase gene into *Bacteroides uniformis* and *Prevotella ruminicola* B(1)4. *Appl Environ Microbiol* **62**: 196-202.

James, C.E., Hasegawa, Y., Park, Y., Yeung, V., Tribble, G.D., Kuboniwa, M., *et al.* (2006) LuxS involvement in the regulation of genes coding for hemin and iron acquisition systems in *Porphyromonas gingivalis*. *Infect Immun* **74**: 3834-3844.

Park, Y., Simionato, M.R., Sekiya, K., Murakami, Y., James, D., Chen, W., *et al.* (2005) Short fimbriae of *Porphyromonas gingivalis* and their role in coadhesion with *Streptococcus gordonii*. *Infect Immun* **73**: 3983-3989.

Simionato, M.R., Tucker, C.M., Kuboniwa, M., Lamont, G., Demuth, D.R., Tribble, G.D., and Lamont, R.J. (2006) *Porphyromonas gingivalis* genes involved in community development with *Streptococcus gordonii*. *Infect Immun* **74**: 6419-6428.

Wu, J., Lin, X., and Xie, H. (2009) Regulation of hemin binding proteins by a novel transcriptional activator in *Porphyromonas gingivalis*. *J Bacteriol* **191**: 115-122.