

**Table S1. Primers used in this study**

Primer name	DNA sequence	Gene	Description	References
F1_PG1573_mut	5'GGAGAACTCCGACGGGTG 3'	PGA7_00004090	Amplify DNA fragments; including sequences flanking the <i>pgrsp</i> gene, as well as <i>ermF</i> cassette for construction of TO11 mutant strain.	This study
R1_PG1573_mut	5'CGCATAACGGCTGCCACAAGCTCAGGCAGAGAG 3'	( <i>pgrsp</i> )		
F3_PG1573_mut	5'GAGACAACCGCGGTGCCGAACTCGTGGAGGGTA 3'			
R3_PG1573_mut	5'TGCCGATAGCTGTTCATCG 3'			
F2_PG1573_mut	5'CTTCGCCTGAGCTGTGGCCAGCCATTGCGGCAG 3'	<i>ermF</i>		
R2_PG1573_mut	5'CCTCACGAGTCGGCACCGCGTTGTCTCTTTTC 3'			
F_PG1573_cmpl	5'GATCCCTGAGCTTCCAATACACGGGAAATTACAC 3'	PGA7_00004090	Amplify DNA fragment of <i>pgrsp</i> gene, including promoter sequence. Used for cloning into pTIO-tetQ plasmid.	This study
R_PG1573_cmpl	5'GATCGGATCCTTACATAAGGGTATTTGTTGCC 3'	( <i>pgrsp</i> )		
F_PG1573_MBP	5'CTCGGGATCGAGGAAGGATGAAGCAGATAGAAGATATATCCG 3'	PGA7_00004090	Amplify DNA fragment of <i>pgrsp</i> gene used for cloning into pMAL_c5x_His plasmid.	This study
R_PG1573_MBP	5'CCTGCAGGGAATTGGATCCTCACATAAGGGTATTTGTTACG 3'	( <i>pgrsp</i> )		
F_PgRsp_C76A	5'ACTATATCAAGGCAGGCCAACCGCTATCATGTCTTCTGGG 3'	<i>pgrsp C76A</i>	Primers used to introduce point mutations in the sequence encoding PgRsp protein,	This study
R_PgRsp_C76A	5'CCCAAGAAAAGACATGATAGCGCTTGCCTGCCTGATATAGT 3'		cloned into pMAL_c5x_His plasmid.	
F_PgRsp_M78A	5'AAGGCAGGCCAACAGCTGTATCGCGTCTTCTGGGGCCTGCAC 3'	<i>pgrsp M78A</i>		
R_PgRsp_M78A	5'GTGCAGGCCAACAGAAAAGACCGGATACAGCTTGCCTGCCT 3'			
F_PgRsp_H85A	5'CTTTCTTGGGGCCTGCCAATGAGACAAGCAAGGTGAAGG 3'	<i>pgrsp H85A</i>		
R_PgRsp_H85A	5'CCTCACCTGCTCTATTGCCAGGCCAACAGAAAAG 3'			
rtFUR6F	5'TTCTCGCTTGCCTTCTCCC 3'	PGA7_00014570	Amplify DNA fragment of the gene in RT-qPCR.	[13]
rtFUR6R	5'TGAGATCCTGCGGCCAGT 3'	( <i>pgfur</i> )		
16SrRNA-F	5'GCTTCGAAATCGAAACGTG 3'	PGA7_00000960	Amplify DNA fragment of the gene in RT-qPCR.	[S1]
16SrRNA-R	5'TATATCCGTCTCGGAACG 3'	(16S rRNA)		
HYq4_F	5'CTTGACTTCAGTGGCGGCAG 3'	PGA7_00004270		
HYq4_R	5'AGGGAAGACGGTTTACCA 3'	( <i>hmuy</i> )		
F_PG1573	5'TTTGAATGAGGCCAGTAGG 3'	PGA7_00004090	Amplify DNA fragment of the gene in RT-qPCR.	[16]
R_PG1573	5'AAGGTGGAGATCGAACAGCA 3'	( <i>pgrsp</i> )		
F_PG0270	5'GTTGGACGAAGTCATTGCT 3'	PGA7_00002460		
R_PG0270	5'TGCTCTACGGTCAGTTGG 3'	( <i>oxyR</i> )		
F_PG0506	5'AATGATAAGCCTTATACTGTAGCTG 3'	PGA7_00014250		
R_PG0506	5'GTTTGTGCTCGAACACCATGC 3'	( <i>rgpB</i> )		
F_PG0553	5'GAGGGACTTGCCGTGACATC 3'	PGA7_00013810		
R_PG0553	5'GCACCACACCGTTCTCT 3'			
F_PG2024	5'GGACAAAGGACCGACGAAAG 3'	PGA7_00018890		
R_PG2024	5'TATAGGTGTAATCGCTTCCACC 3'	( <i>rgpA</i> )		

F_PG1844	5'GAGTGTGGGTGCTAATGCCG 3'	PGA7_00017110	
R_PG1844	5'CACCAATATGGTAATATTGCCG 3'	( <i>kgp</i> )	
F_sod	5'GCCGAATTGTTGTCGATAG 3'	PGA7_00004330	Amplify DNA fragment of the gene in This study
R_sod	5'AATTCCACCACCGTAAGCACC 3'	( <i>sod</i> )	RT-qPCR.
F_fimA	5'CTATCCTGGTGGGACTGCATC 3'	PGA7_00019920	
R_fimA	5'ACCAAAGAATTCCGAAAATC 3'	( <i>fimA</i> )	
F_bcp	5'TGAGACGCACTTCCTCATCC 3'	PGA7_00010740	
R_bcp	5'TATCGCGGACGAAAGATCGC 3'	( <i>bcp</i> )	
F_ahpC	5'CTACGCTGTTGTCGTTAGC 3'	PGA7_00013260	
R_ahpC	5'TTGCGATACCCACCTCGTAC 3'	( <i>ahpC</i> )	
F_dps	5'GAGCGTATCCTCCAACTTGG 3'	PGA7_00000850	
R_dps	5'AATCCACCGTTACCTCATCG 3'	( <i>pgdps</i> )	
F_tpx	5'CGCCGTTCAATCAGGAAGC 3'	PGA7_00002640	
R_tpx	5'GCCAAGAGACCTTCAAAGGG 3'	( <i>tpx</i> )	
F_rbr	5'GCCGTATTCGTCAGATAGC 3'	PGA7_00001850	
R_rbr	5'TTCATTGGCTCGAAGTAAGCC 3'	( <i>rbr</i> )	
F_primer	5'ATGCAACGCATTGCCG 3'	PGA7_00002300	Amplify DNA fragment of the gene in [S2]
R_primer	5'TGCATTGGCTTCGCC 3'	( <i>ustA</i> )	RT-qPCR.
F_hmu_EMMA	5'CGGAATAATCGGCTGATAACAC 3'	PGA7_00004270	Amplify DNA fragments of the genes used [16]
R_hmu_EMMA	5'TAGAGACACAATCAATGGCAATG 3'	( <i>hmuY</i> )	as probes in EMSA; forward primers were used with or without biotin attached to the 5' end.
F_bcp_EMMA	5'TCATGAGCTTAGATGTACGTTAG 3'	PGA7_00010740	Amplify DNA fragments of the genes used This study
R_bcp_EMMA	5'TCAGGAATACCGTCTCCTATTGT 3'	( <i>bcp</i> )	as probes in EMSA; forward primers were used with or without biotin attached to the 5' end.
F_PgRsp_EMMA	5'GACTGCTGTGCTTAACTGAAAAAC 3'	PGA7_00004090	
R_PgRsp_EMMA	5'AGGATGCCATGCTTACAGTTG 3'	( <i>pgrsp</i> )	

S1. Gmiterek, A., Wójtowicz, H., Mackiewicz, P., Radwan-Oczko, M., Kantorowicz, M., Chomyszyn-Gajewska, M., Frąszczak, M., Bielecki, M., Olczak, M., Olczak, T. The unique *hmuY* gene sequence as a specific marker of *Porphyromonas gingivalis*. *PLoS One.* 2013 2;8(7):e67719. doi: 10.1371/journal.pone.0067719.

S2. Boutrin, M.C., Wang, C., Aruni, W., Li, X., Fletcher, H.M. Nitric oxide stress resistance in *Porphyromonas gingivalis* is mediated by a putative hydroxylamine reductase. *J Bacteriol.* 2012 194(6):1582-92. doi: 10.1128/JB.06457-11.