Supplementary Table 1. Primers used for molecular biology work.

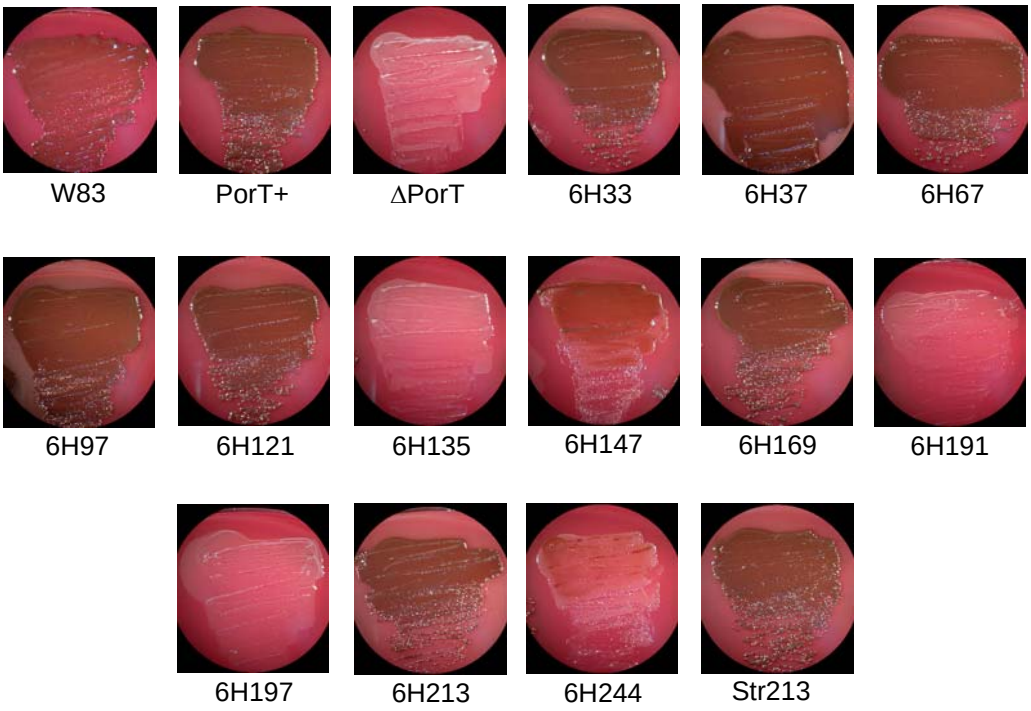
For creation of plasmids[a]:	Primer Name	Sequence[b] (5′ – 3′)
		Cloning primers
pPorTAtB-C (PorT+ mutant)	PorTFrBXbaIF	ac**TCTAGA**AGTGGCGCATATCCTTGCA
	PorTFrBPstIR2	tata**CTGCAG**ACCTTCAGAACCGGAATCTGA
	tetQXmaIF	tata**CCCGGG**ACAACGAATTATCTCCTTAACGT
	tetQXbaIR	cgc**TCTAGA**TTTTATTGCCAAGTTCTAATGCT
	PorTSacIF	at**GAGCTC**CGTATATAGTCCACGGCTTGCT
	PorTSmaIR	aata**CCCGGG**CCACTGACCTGTCGAAAAGAG
		Mutagenesis primers
pΔPorT-C (ΔPorT mutant)	DelPorTFA	***TGAAGATTATTCTCTCAG***TAGTTGTCACGCTCTTTTCGAC
	DelPorTFB	TAGTTGTCACGCTCTTTTCGACA
	DelPorTRA	***CTGAGAGAATAATCTTCA***ATTCTTTATTTGGTGTGT
	DelPorTRB	ATTCTTTATTTGGTGTGTAAGATCAACGC
p6HPorT-A (6H33 mutant)	6HPorTFA	***CATCACCATCACCATCAC***GTACAAAATCGCCCCTACGC
	6HPorTFB	GTACAAAATCGCCCCTACGC
	6HPorTRA	***GTGATGGTGATGGTGATG***TTTTTCCGTTTGCGCCGA
	6HPorTRB	TTTTTCCGTTTGCGCCGACA
pPorT6HPYA-A (6H37 mutant)	Por6HPYAFA	***CATCACCATCACCATCAC***CCCTACGCCGACTACAAAC
	Por6HPYAFB	CCCTACGCCGACTACAAAC
	Por6HPYARA	***GTGATGGTGATGGTGATG***GCGATTTTGTACTTTTTCCGTTTG
	Por6HPYARB	GCGATTTTGTACTTTTTCCGTTTG
pPorT6HEGS-A (6H67 mutant)	Por6HEGSFA	***CATCACCATCACCATCAC***GAAGGGAGTACGTCGACTC
	Por6HEGSFB	GAAGGGAGTACGTCGACTC
	Por6HEGSRA	***GTGATGGTGATGGTGATG***GGGTACAAACCCGTTGTTG
	Por6HEGSRB	GGGTACAAACCCGTTGTTGG
pPorT6HPNL-A (6H97 mutant)	Por6HPNLFA	***CATCACCATCACCATCAC***CCCAATCTGAATTTACGTTTGCT
	Por6HPNLFB	CCCAATCTGAATTTACGTTTGCT
	Por6HPNLRA	***GTGATGGTGATGGTGATG***CAGAAGGAACATATCACCGATCA
	Por6HPNLRB	CAGAAGGAACATATCACCGATCA
pPorT6HKPV-B (6H121 mutant)	Por6HKPVFA	***CATCACCATCACCATCAC***AAACCCGTGGCCTCTTTC
	Por6HKPVFB	AAACCCGTGGCCTCTTTC
	Por6HKPVRA	***GTGATGGTGATGGTGATG***CTCCCCATCGGAAAAGACAA
	Por6HKPVRB	CTCCCCATCGGAAAAGACAA
pPorT6HFPL-B (6H135 mutant)	Por6HFPLFA	***CATCACCATCACCATCAC***TTTCCGCTATTATTGAAATATGGTTCTC
	Por6HFPLFB	TTTCCGCTATTATTGAAATATGGTTCTC
	Por6HFPLRA	***GTGATGGTGATGGTGATG***TTCCAAATAATTGGATCGAACGGA
	Por6HFPLRB	TTCCAAATAATTGGATCGAACGGA
pPorT6HNNM-B (6H147 mutant)	Por6HNNMFA	***CATCACCATCACCATCAC***AACAATATGCGTCCATACCTCAT
	Por6HNNMFB	AACAATATGCGTCCATACCTCAT
	Por6HNNMRA	***GTGATGGTGATGGTGATG***CAGGCGCCGAGAACCATA
	Por6HNNMRB	CAGGCGCCGAGAACCATA
pPorT6HLEI-A (6H169 mutant)	Por6HLEIFA	***CATCACCATCACCATCAC***TTGGAGATTTATACCAAAGCGAACGA
	Por6HLEIFB	TTGGAGATTTATACCAAAGCGAACGA
	Por6HLEIRA	***GTGATGGTGATGGTGATG***CCCCTTCTTTCGCCCCAG
	Por6HLEIRB	CCCCTTCTTTCGCCCCAG
pPorT6HPFF-B (6H191 mutant)	Por6HPFFFA	***CATCACCATCACCATCAC***CCTTTTTTCAAATTGTGCCCCGAACT
	Por6HPFFFB	CCTTTTTTCAAATTGTGCCCCGAACT
	Por6HPFFRA	***GTGATGGTGATGGTGATG***CAGGTAAAAATCGCATCCGAGACC
	Por6HPFFRB	CAGGTAAAAATCGCATCCGAGACC
pPorT6HPEL-A (6H197 mutant)	Por6HPELFA	***CATCACCATCACCATCAC***CCCGAACTGCGCTTTAGC
	Por6HPELFB	CCCGAACTGCGCTTTAGC
	Por6HPELRA	***GTGATGGTGATGGTGATG***GCACAATTTGAAAAAAGGCAGGTAAAAATC
	Por6HPELRB	GCACAATTTGAAAAAAGGCAGGTAAAAATC
pPorT6HRPD-A (6H213 mutant)	Por6HRPDFA	***CATCACCATCACCATCAC***CGTCCTGATCTTTTGGATGATTATAAGT
	Por6HRPDFB	CGTCCTGATCTTTTGGATGATTATAAGT
	Por6HRPDRA	***GTGATGGTGATGGTGATG***CTCGTGTGTGATAACATCGGGAA
	Por6HRPDRB	CTCGTGTGTGATAACATCGGGAA

pPorT6H-A (6H244 mutant)	PorT6HFA	***CATCACCATCACCATCAC***TAGTTGTCACGCTCTTTTCGACA
	DelPorTFB	TAGTTGTCACGCTCTTTTCGACA
	PorT6HRA	***GTGATGGTGATGGTGATG***CTCGAAATTGAACGTAAGCATAATCA
	PorT6HRB	CTCGAAATTGAACGTAAGCATAATCATTC
pPorTStrRPD-A (Str213 mutant)	PorTStrRPDFA	***TGGTCTCATCCTCAGTTCGAAAAG***CGTCCTGATCTTTTGGATGATTATAA
	Por6HRPDFB	CGTCCTGATCTTTTGGATGATTATAAGT
	PorTStrRPDRA	***CTTTTCGAACTGAGGATGAGACCA***CTCGTGTGTGATAACATCGG
	Por6HRPDRB	CTCGTGTGTGATAACATCGGGAA
Real-time PCR primers		
rgpB gene	RgpBTMF	CGATCGTAGCATTCTCCTCTCTGTTG
	RgpBTMR	CAGCGGAGAGCAGTCGTACT
gyrA gene	GyrATMF2	GGGATCGGATACTCGCGAAGA
	GyrATMR	GGATTTCATACACCTTCAGCCAATAGCA
	hGyrAProbeBFQ	ACTCGGCCTCCATGCACGCCACC
porT gene	PgPorTTMF	AGAGTCGCTCTCTTTTGCCTGAT
	PgPorTTMR	TGGAATCCAAGATGATAGCGTTTGTAGTC
	fPgPorTProbeBFQ	CCTGGGCCGGACGTACGCTGTCG

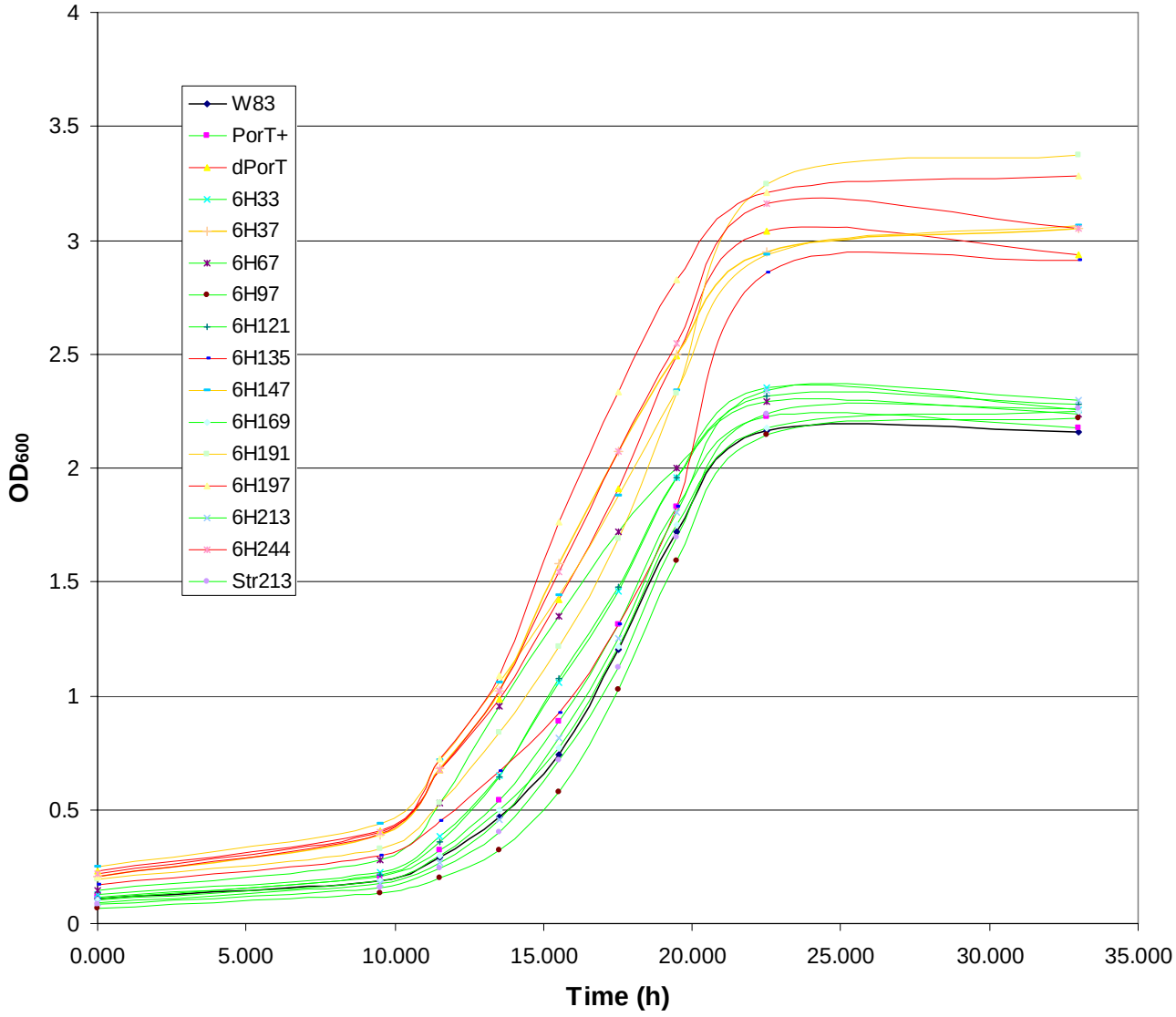
[a] Named plasmids used for double crossover into *P. gingivalis* to create the desired mutant (in brackets).

[b] Restriction sites are in bold and irrelevant bases for ease of restriction digest are in lowercase. Complementary overhangs for the SLIM mutagenesis technique are in bold italics.

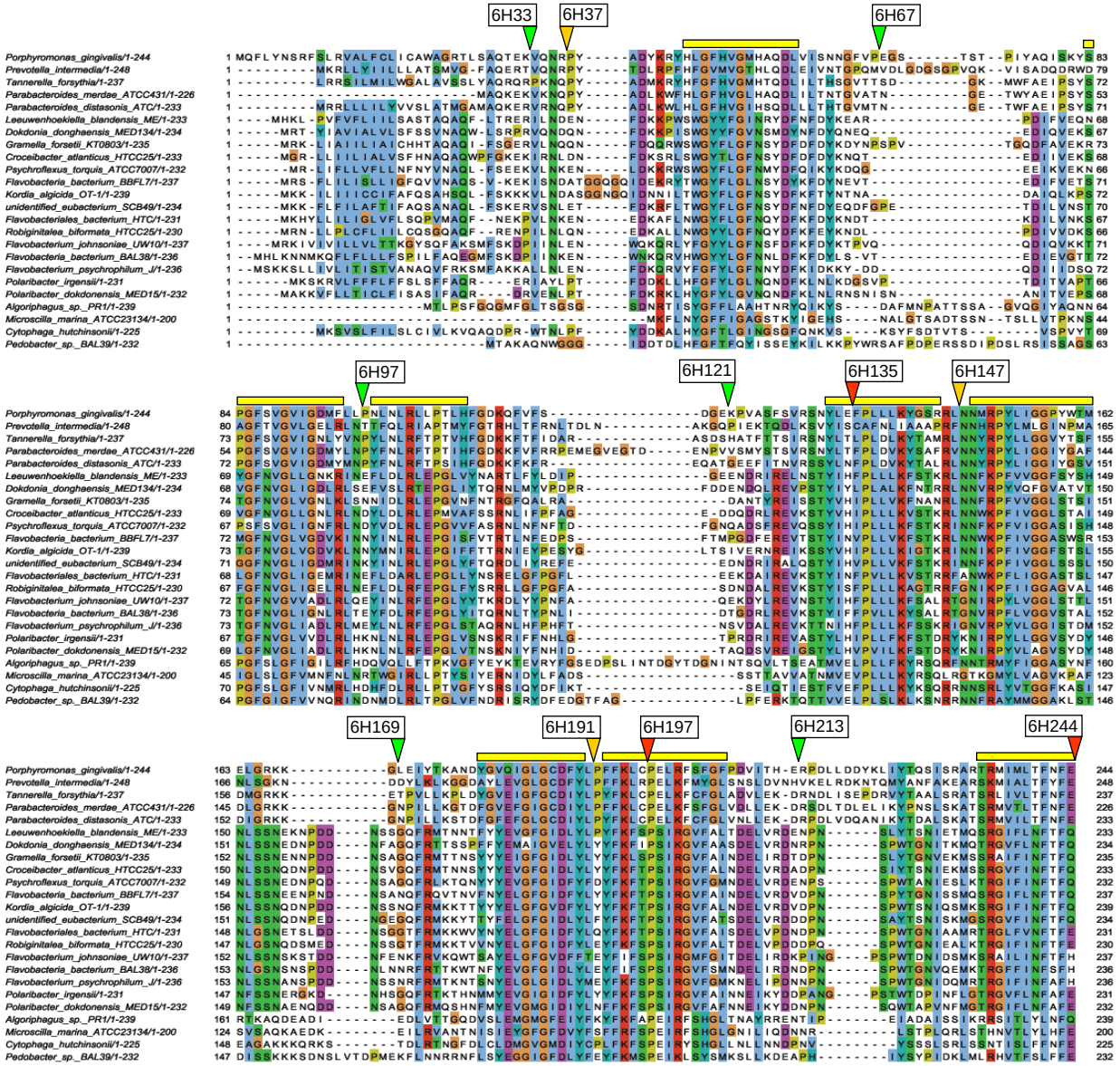
Supplementary Figure 1. Pigmentation of PorT mutants after 3 days growth on blood agar.



Supplementary Figure 2. Growth curve of PorT mutants in eTSB media. Pre-warmed 5 mL media in Teflon-capped tubes was inoculated with a 1:50 inoculum of an overnight starter culture that has been adjusted to OD_{600} 1.0 using fresh media. Absorbance at 600 nm was measured at pre-determined time points and data shown were averaged from quadruplicate cultures with the SEM falling between 1-10% of the observed OD value. Mutants with fully functional PorT are represented with green lines, those with partially defective PorT with orange lines and non-functional PorT with red lines. Two independent runs gave similar results.



Supplementary Figure 3. Multiple alignment of PorT homologues in sequenced genomes using the ClustalW program at the European Bioinformatics Institute (www.ebi.ac.uk/clustalw/) and displayed using the JalView program (1). Highly conserved regions of predicted transmembrane β-sheets are indicated by yellow bars above the alignment. Arrowheads indicate the 6×His insertion sites in PorT of *P. gingivalis* along with the mutant names (boxed). Mutants with fully functional PorT are represented in green, those with partially defective PorT in orange and non-functional PorT in red.



Reference:

1. **Clamp, M., J. Cuff, S. M. Searle, and G. J. Barton.** 2004. The Jalview Java alignment editor. Bioinformatics **20:**426-7.