

A

Pg strains ATGAAAAAATCATTTTCTCCGCACTCTGTGCATTGCCATTGATTGTGTC**T**CTAA**C**TTCTTGTGGGAAGA
 samples ATGAAAAAATCATTTTCTCCGCACTCTGTGCATTGCCATTGATTATGTC**Y**CTAA**Y**TTCTTGTGGGAAGA

Pg strains AGAAAGACGAGCCGAACCAACC**C**TCCACACCCGAAGCAG**T**AACCAAAACCGTAACTATCGATGCTTCGAA
 samples AGAAAGACGAGCCGAACCAACC**Y**TCCACACCCGAAGCAG**W**AACCAAAACCGTAACTATCGATGCTTCGAA

Pg strains ATACGAAACGTGGCAGTATTTCTCTTTTCCAAAGGTGAAGTC**G**TAAATGTTACCGACTATAAGAACGAT
 samples ATACGAAACGTGGCAGTATTTCTCTTTTCCAAAGGTGAAGTC**K**TAAATGTTACCGACTATAAGAACGAT

Pg strains TTGAACCTGGGACATGGCTCTTCACCGC**Y**ATGA**Y**GTTTCGTCTCAATTGTGGCGAAAGTGG**Y**AAAGGGAAAAAG
 samples TTGAACCTGGGACATGGCTCTTCACCGC**T**ATGA**B**GTTTCGTCTCAATTGTGGCGAAAGTGG**Y**AAAGGGAAAAAG

Pg strains GTGGTGCCGTATTCTCCGGCAAGACAGAAATGGATCAGGCTACT**W**CCGTTCCGACAGACGGATATAC**Y**GT
 samples GTGGTGCCGTATTCTCCGGCAAGACAGAAATGGATCAGGCTACT**W**CCGTTCCGACAGACGGATATAC**Y**GT

Pg strains AGATGTTCTC**G**GCCGTATTACAGT**C**AAGTACGAAATGGGACCTGATGGTCATCAGATGGAATATGAAGAA
 samples AGATGTTCTC**K**GCCGTATTACAGT**Y**AAGTACGAAATGGGACCTGATGGTCATCAGATGGAATATGAAGAA

Pg strains CAGGGCTTCAG**Y**GAAAGTGATTACCGCAAGAAGAACGCACAGGGATTTGCTTCAGGTGGTTGG**C**TGGAAT
 samples CAGGGCTTCAG**Y**GAAAGTGATTACCGCAAGAAGAACGCACAGGGATTTGCTTCAGGTGGTTGG**Y**TGGAAT

Pg strains TCTCTCACGGTCCTGCCGG**T**CCCACTTACAAGCTGAGCAAAAGAGT**Y**TTCTTCGTTCTGGTGGCTGATGG
 samples TCTCTCACGGTCCTGCCGG**Y**CCCACTTACAAGCTGAGCAAAAGAGT**Y**TTCTTCGTTCTGGTGGCTGATGG

Pg strains **W**AATATTGCCAAAGTGCAAGTTCAGTCACTGACTATCAGGATGCAGAACTCAAAAAAGGAGTCATCACTTTTCGT
 samples **W**AATATTGCCAAAGTGCAAGTTCAGTCACTGACTATCAGGATGCAGAGCTCAAAAAAGGAGTCATCACTTTTCACT

Pg strains TATACATACCCCG**T**TAAATAA
 samples TATACATACCCCG**Y**TAAATAA

B

Pg strains MKKIIIFSALCALPLIVSLTSCGKKKDEPNQPSTPEAVTKTVIDASKYETWQYFSFSKGEVVNVTDYKND
 samples MKKIIIFSALCALPLIM**X**L**X**SCGKKKDEPNQ**X**STPEA**X**TKTVIDASKYETWQYFSFSKGEV**X**NVTDYKND

Pg strains LNWDMALHRY**X**DVRLNCGESGKGKGGAVFSGKTEMDQAT**X**VPTDGYTVDLGRITVKYEMGPDGHHQMEYEE
 samples LNWDMALHRY**X**VRLNCGES**X**KGKGGAVFSGKTEMDQAT**X**VPTDGY**X**VDVL**X**RI**X**KYEMGPDGHHQMEYEE

Pg strains QGFSEVITGKKNAQGFASGGWLEFSGHPAGPTYKLSKR VFFVRGADGNI AKVQFTDYQDAELKKGVITFT
 samples QGF**X**EVITGKKNAQGFASGGW**X**EFSGHPA**X**PTYKLSKR**X**FFVRGAD**X**NI AKVQFTDYQDAELKKGVITFT

Pg strains Y T Y P V K
 samples Y T Y P **X** K

Figure S3. Comparison of *P. gingivalis* HmuY identified in database-deposited sequences and in isolates from human subjects. Differences in nucleotide (a) or amino-acid sequences (b) are shown in black boxes. (a) Y = T or C; K = T or G; W = T or A; B = T or G or C; (b) X = an amino acid as defined by the respective codon. Pg strains, *P. gingivalis* strains (A7436, W50, W83, TDC60, ATCC 33277, 381); Samples, *P. gingivalis* isolates present in human samples.