Table S1. Distribution of the *cag*PAI genes among 91 *cag*PAI-positive *H. pylori* isolates from patients with different ethnicities

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Gene no. in 26695 strain | Gene name | Component of T4SS | n (%) | Patients’ ethnicity, n (%) | | |
| M (n=15) | C (n=51) | I (n=19) |
| HP0520 | *cag1* (*cagζ*) | - | 85 (100) | 15 (100) | 51 (100) | 19 (100) |
| HP0521 | *cag2* | - | 29 (34.1) | 13 (86.7) | 5 (9.8) | 11 (57.9) |
| HP0522 | *cag3* (*cagΔ*) | u | 84 (98.8) | 15 (100) | 51 (100) | 18 (94.7) |
| HP0523 | *cag4* (*cagγ*) | VirB1 | 60 (70.6) | 7 (46.7) | 41 (80.4) | 12 (63.2) |
| HP0524 | *cag5* (*cagβ*) | VirD4 | 85 (100) | 15 (100) | 51 (100) | 19 (100) |
| HP0525 | *cagα* | VirB11 | 79 (92.9) | 14 (93.3) | 50 (98) | 15 (78.9) |
| HP0526 | *cag6* (*cagZ*) | - | 85 (100) | 15 (100) | 51 (100) | 19 (100) |
| HP0527 | *cag7* (*cagY*) | VirB9 | 82 (96.5) | 15 (100) | 50 (98) | 17 (89.5) |
| HP0528 | *cag8* (*cagX*) | VirB6 | 85 (100) | 15 (100) | 51 (100) | 19 (100) |
| HP0529 | *cag9* (*cagW*) | VirB8 | 84 (98.8) | 15 (100) | 51 (100) | 18 (94.7) |
| HP0530 | *cag10* (*cagV*) | - | 82 (96.5) | 14 (93.3) | 50 (98) | 18 (94.7) |
| HP0531 | *cag11* (*cagU*) | VirB7 | 71 (83.5) | 15 (100) | 41 (80.4) | 15 (78.9) |
| HP0532 | *cag12* (*cagT*) | - | 84 (98.8) | 15 (100) | 51 (100) | 18 (94.7) |
| HP0534 | *cag13* (*cagS*) | - | 83 (97.6) | 15 (100) | 51 (100) | 17 (89.5) |
| HP0535 | *cag14* (*cagQ*) | - | 44 (51.7) | 14 (93.3) | 20 (39.2) | 10 (52.6) |
| HP0536 | *cag15* (*cagP*) | - | 83 (97.6) | 15 (100) | 51 (100) | 17 (89.5) |
| HP0537 | *cag16* (*cagM*) | u | 78 (91.8) | 15 (100) | 49 (96.1) | 14 (73.7) |
| HP0538 | *cag17* (*cagN*) | - | 80 (94.1) | 15 (100) | 48 (94.1) | 17 (89.5) |
| HP0539 | *cag18* (*cagL*) | VirB5 | 81 (95.3) | 15 (100) | 50 (98) | 16 (84.2) |
| HP0540 | *cag19* (*cagI*) | - | 79 (92.9) | 15 (100) | 48 (94.1) | 16 (84.2) |
| HP0541 | *cag20* (*cagH*) | - | 83 (97.6) | 14 (93.3) | 51 (100) | 18 (94.7) |
| HP0542 | *cag21* (*cagG*) | - | 85 (100) | 15 (100) | 51 (100) | 19 (100) |
| HP0543 | *cag22* (*cagF*) | - | 83 (97.6) | 15 (100) | 51 (100) | 17 (89.5) |
| HP0544 | *cag23* (*cagE*) | VirB3/B4 | 81 (95.3) | 15 (100) | 50 (98) | 16 (84.2) |
| HP0545 | *cag24* (*cagD*) | - | 59 (69.4) | 14 (93.3) | 28 (54.9) | 17 (89.5) |
| HP0546 | *cag25* (*cagC*) | VirB2 | 75 (88.2) | 14 (93.3) | 46 (90.2) | 15 (78.9) |
| HP0547 | *cag26 (cagA)* | effector | 84 (98.8) | 15 (100) | 50 (98) | 19 (100) |

M; Malays, C; Chinese, I; Indians, u; unknown function