S2 Table. Serogroup, genogroup and Ct values of porA, ctrA and eight genogrouping rt-PCR assays in 234 carriage isolates.

| 52 143 | Group | GGroup | cnl | porA | ctrA | NmA | NmB | NmC | NmW | NmX | NmY | NmE | NmE | NmZ | NmZ | porA | Delta |
|---------|--------|--------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|
| Strain | (SASG) | rt-PCR | PCR | Ct | Ct* | Ct | Ct* | Ct | -ctrA | Ct |
| PMB1475 | NG | NGG | cnl | 24.18 | No Ct | 39.26 | ND | No Ct | ND | NA | |
| PMB3421 | NG | NGG | cnl | 20.75 | No Ct | ND | No Ct | ND | NA | |
| PMB995 | NG | NGG | cnl | 26.60 | No Ct | ND | No Ct | ND | NA | |
| PMB643 | NG | В | | 14.92 | 15.08 | No Ct | 29.93 | No Ct | No Ct | No Ct | 34.54 | No Ct | ND | No Ct | ND | 0.2 | 19.6 |
| PMB3316 | NG | NGG | cnl | 16.03 | 16.38 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB1525 | NG | NGG | cnl | 23.98 | 34.10 | No Ct | 37.24 | ND | No Ct | ND | 10.1 | |
| PMB1345 | NG | NGG | cnl | 23.02 | No Ct | 37.57 | ND | No Ct | ND | NA | |
| PMB1462 | NG | NGG | cnl | 21.56 | 39.18 | No Ct | No Ct | No Ct | 38.76 | No Ct | No Ct | No Ct | ND | No Ct | ND | 17.6 | |
| PMB2540 | NG | В | cnl | 19.56 | 34.16 | No Ct | 20.72 | No Ct | No Ct | No Ct | No Ct | 30.58 | 36 | No Ct | ND | 14.6 | |
| PMB1255 | NG | NGG | cnl | 19.64 | No Ct | No Ct | 33.87 | No Ct | ND | No Ct | ND | NA | 14.2 |
| PMB439 | NG | NGG | cnl | 20.11 | No Ct | ND | No Ct | ND | NA | |
| PMB3085 | NG | NGG | cnl | 19.21 | No Ct | 38.07 | ND | No Ct | ND | NA | |
| PMB971 | NG | NGG | cnl | 19.75 | No Ct | ND | No Ct | ND | NA | |
| PMB1680 | NG | NGG | cnl | 24.50 | No Ct | ND | No Ct | ND | NA | |
| PMB3220 | NG | NGG | cnl | 19.98 | No Ct | 38.6 | ND | No Ct | ND | NA | |
| PMB2252 | NG | NGG | cnl | 18.42 | No Ct | ND | No Ct | ND | NA | |
| PMB3280 | NG | NGG | cnl | 24.09 | 32.83 | No Ct | 38.65 | No Ct | ND | No Ct | ND | 8.7 | |
| PMB2080 | NG | NGG | cnl | 22.00 | 33.83 | No Ct | 32.86 | No Ct | ND | No Ct | ND | 11.8 | 10.9 |
| PMB976 | NG | NGG | cnl | 21.14 | No Ct | 37.53 | No Ct | No Ct | ND | NA | |
| PMB1197 | NG | NGG | cnl | 21.72 | 33.54 | No Ct | 33.48 | No Ct | No Ct | ND | 11.8 | 11.8 |
| PMB1980 | NG | NGG | cnl | 18.67 | 26.18 | No Ct | 39.18 | No Ct | ND | No Ct | ND | 7.5 | |
| PMB1484 | NG | NGG | cnl | 19.78 | 30.26 | No Ct | 38.35 | No Ct | No Ct | ND | 10.5 | |
| PMB3289 | NG | NGG | cnl | 17.52 | 32.88 | No Ct | 30.12 | ND | No Ct | ND | 15.4 | 12.6 |
| PMB2108 | NG | NGG | cnl | 20.09 | 31.69 | No Ct | No Ct | No Ct | 38.55 | No Ct | No Ct | No Ct | ND | No Ct | ND | 11.6 | |
| PMB1218 | NG | NGG | cnl | 18.53 | No Ct | ND | No Ct | ND | NA | |
| PMB2332 | NG | NGG | cnl | 19.65 | No Ct | ND | No Ct | ND | NA | |
| PMB2793 | NG | NGG | cnl | 20.49 | 36.02 | No Ct | 39.37 | No Ct | 37.72 | No Ct | No Ct | No Ct | ND | No Ct | ND | 15.5 | |
| PMB1750 | NG | NGG | cnl | 23.49 | 34.30 | No Ct | 33.72 | No Ct | ND | No Ct | ND | 10.8 | 10.2 |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB3519 | NG | NGG | cnl | 21.42 | 32.31 | No Ct | 38.44 | No Ct | No Ct | No Ct | 37.82 | 30.65 | ND | No Ct | ND | 10.9 | 9.2 |
| PMB1383 | NG | NGG | cnl | 22.26 | 32.75 | No Ct | 32.08 | 37.45 | No Ct | No Ct | No Ct | 36.8 | ND | No Ct | ND | 10.5 | 9.8 |
| PMB347 | NG | В | cnl | 26.08 | 30.15 | No Ct | 29.47 | No Ct | ND | No Ct | ND | 4.1 | |
| PMB2708 | NG | NGG | cnl | 21.62 | 26.38 | No Ct | 39.29 | No Ct | ND | No Ct | ND | 4.8 | |
| PMB1353 | NG | NGG | cnl | 20.69 | 30.62 | No Ct | No Ct | No Ct | 36.15 | No Ct | No Ct | 37.74 | ND | 37.55 | ND | 9.9 | |
| PMB2285 | NG | NGG | cnl | 21.36 | 30.80 | No Ct | ND | No Ct | ND | 9.4 | |
| PMB3162 | NG | NGG | cnl | 21.03 | 28.65 | No Ct | ND | No Ct | ND | 7.6 | |
| PMB1141 | NG | С | | 13.95 | 29.30 | No Ct | 33.86 | 22.04 | No Ct | No Ct | No Ct | 38.68 | ND | No Ct | ND | 15.4 | 8.1 |
| PMB1946 | NG | NGG | cnl | 21.35 | 31.10 | No Ct | 37.52 | ND | No Ct | ND | 9.7 | |
| PMB242 | NG | NGG | ND | 19.32 | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | 35.15 | No Ct | No Ct | No Ct | NA | |
| PMB1104 | Y | NGG | ND | 22.31 | 22.20 | No Ct | 32.67 | No Ct | ND | No Ct | ND | 0.1 | 10.4 |
| PMB1741 | NG | В | ND | 17.65 | No Ct | No Ct | 16.44 | No Ct | No Ct | 32.59 | No Ct | No Ct | ND | No Ct | ND | NA | 14.9 |
| PMB1088 | W | NGG | ND | 18.79 | 31.71 | No Ct | ND | No Ct | ND | 12.9 | |
| PMB3642 | В | NGG | ND | 17.92 | 24.59 | No Ct | 36 | No Ct | 30.87 | No Ct | No Ct | 38.56 | ND | No Ct | ND | 6.7 | 13.0 |
| PMB968 | NG | В | No cnl | 21.67 | 32.42 | No Ct | 17.37 | No Ct | ND | No Ct | ND | 10.7 | |
| PMB1567 | NG | NGG | NR | 20.55 | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | NA | |
| PMB2616 | NG | NGG | NR | 15.39 | 15.48 | No Ct | 35.12 | 37.12 | No Ct | No Ct | No Ct | 33.77 | ND | No Ct | ND | 0.1 | 18.4 |
| PMB1934 | NG | NGG | NR | 22.18 | 21.22 | No Ct | 32.69 | 38.24 | No Ct | No Ct | No Ct | 34.79 | ND | No Ct | ND | 1.0 | 10.5 |
| PMB419 | NG | NGG | NR | 20.22 | 22.58 | No Ct | ND | No Ct | ND | 2.4 | |
| PMB2638 | NG | NGG | NR | 19.49 | 19.20 | No Ct | No Ct | 33 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.3 | 13.5 |
| PMB804 | NG | NGG | NR | 18.79 | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | NA | |
| PMB312 | NG | NGG | NR | 18.81 | 33.17 | No Ct | 38.64 | ND | No Ct | ND | 14.4 | |
| PMB3474 | NG | NGG | NR | 18.77 | 18.80 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB2759 | NG | NGG | NR | 20.84 | 20.73 | No Ct | 37.39 | No Ct | No Ct | ND | 0.1 | |
| PMB2084 | NG | NGG | NR | 18.13 | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | No Ct | 37.74 | ND | No Ct | ND | NA | |
| PMB1668 | NG | NGG | NR | 23.65 | 39.11 | No Ct | No Ct | No Ct | 38.66 | No Ct | No Ct | No Ct | ND | No Ct | ND | 15.5 | |
| PMB2581 | NG | NGG | NR | 22.37 | 21.62 | No Ct | 36.22 | No Ct | ND | No Ct | ND | 0.8 | |
| PMB1990 | NG | Е | | 19.32 | 20.84 | No Ct | No Ct | No Ct | 39.53 | No Ct | No Ct | No Ct | 18.12 | No Ct | ND | 1.5 | |
| PMB3412 | NG | NGG | NR | 24.33 | 24.16 | No Ct | ND | No Ct | ND | 0.2 | |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB460 | NG | NGG | NR | 20.72 | 20.83 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2548 | NG | Y | | 20.40 | 20.45 | No Ct | 37.24 | No Ct | No Ct | No Ct | 28.8 | 35.07 | ND | No Ct | ND | 0.1 | |
| PMB1781 | NG | NGG | NR | 22.47 | 32.37 | No Ct | 38.21 | 39.41 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 9.9 | |
| PMB2574 | NG | NGG | NR | 18.87 | 18.62 | No Ct | 32.95 | No Ct | ND | No Ct | ND | 0.2 | 14.1 |
| PMB3507 | NG | Y | | 24.96 | 24.65 | No Ct | 26.1 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB1155 | В | В | | 16.99 | 16.49 | No Ct | 15.66 | No Ct | ND | No Ct | ND | 0.5 | |
| PMB473 | В | В | | 21.82 | 21.66 | No Ct | 22.91 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB3509 | В | В | | 24.91 | 24.75 | No Ct | 30.65 | No Ct | ND | No Ct | ND | 0.2 | 5.7 |
| PMB1827 | NG | Y | | 26.90 | 26.84 | No Ct | 29.09 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2333 | В | В | | 18.93 | 19.00 | No Ct | 18.89 | No Ct | No Ct | No Ct | No Ct | 36.42 | No Ct | No Ct | No Ct | 0.1 | |
| PMB724 | В | В | | 22.24 | 21.70 | No Ct | 23.26 | No Ct | ND | No Ct | ND | 0.5 | |
| PMB3011 | X | В | | 19.25 | 18.88 | No Ct | 18.66 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB2061 | В | В | | 21.75 | 21.70 | No Ct | 20.74 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2338 | W | W | | 15.72 | 14.96 | No Ct | 36.67 | No Ct | 14.12 | No Ct | 28.3 | No Ct | ND | No Ct | ND | 0.8 | 12.6 |
| PMB1821 | NG | Y | | 19.98 | 19.86 | No Ct | 21.23 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB3147 | В | В | | 15.57 | 15.26 | No Ct | 15.37 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB676 | В | В | | 15.90 | 15.56 | No Ct | 15.55 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB1742 | В | В | | 16.35 | 16.31 | No Ct | 16.83 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB1358 | NG | С | | 19.36 | 19.04 | No Ct | No Ct | 19.86 | No Ct | No Ct | No Ct | No Ct | ND | 38.91 | ND | 0.3 | |
| PMB2109 | NG | В | | 17.49 | 17.33 | No Ct | 17.32 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2659 | NG | В | | 19.10 | 18.82 | No Ct | 18.61 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB2758 | В | В | | 15.00 | 14.97 | No Ct | 15.5 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB248 | NG | В | | 19.64 | 19.44 | No Ct | 19.76 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB3399 | NG | Y | | 16.78 | 16.96 | No Ct | 35.73 | No Ct | 37.35 | No Ct | 18.03 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB1465 | NG | W | | 14.27 | 14.71 | No Ct | 36.06 | No Ct | 18.04 | 37.25 | No Ct | No Ct | ND | No Ct | ND | 0.4 | |
| PMB1132 | NG | W | | 22.78 | 22.54 | No Ct | No Ct | 39.38 | 20.62 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2091 | В | В | | 15.61 | 15.49 | No Ct | 15.16 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB3397 | Y | Y | | 21.25 | 21.06 | No Ct | 33.76 | No Ct | No Ct | No Ct | 22.71 | No Ct | ND | No Ct | ND | 0.2 | 12.5 |
| PMB1971 | В | В | | 18.15 | 17.77 | No Ct | 16.97 | No Ct | ND | No Ct | ND | 0.4 | |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB3076 | NG | В | | 25.34 | 24.94 | No Ct | 18.04 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB3307 | NG | В | | 14.10 | 23.74 | No Ct | 19.4 | 38.06 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 9.6 | |
| PMB2884 | NG | Y | | 20.42 | 20.16 | No Ct | 36.86 | No Ct | No Ct | No Ct | 17.2 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB3057 | NG | Е | | 20.64 | 22.73 | No Ct | 28.14 | No Ct | No Ct | No Ct | No Ct | 16.89 | 14.21 | No Ct | ND | 2.1 | 7.5 |
| PMB2947 | В | В | | 15.74 | 15.70 | No Ct | 14.89 | No Ct | No Ct | No Ct | No Ct | 34.05 | ND | No Ct | ND | 0.0 | 18.3 |
| PMB1078 | NG | В | | 21.12 | 20.71 | No Ct | 18.05 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB818 | Е | Е | | 17.01 | 16.77 | No Ct | 31.57 | No Ct | No Ct | No Ct | No Ct | 16.68 | 28.88 | No Ct | ND | 0.2 | 14.6 |
| PMB2456 | NG | Е | | 23.38 | 25.42 | No Ct | 20.45 | 19 | No Ct | ND | 2.0 | |
| PMB2113 | В | В | | 16.18 | 15.65 | No Ct | 15.33 | No Ct | ND | No Ct | ND | 0.5 | |
| PMB1595 | В | В | | 17.28 | 16.93 | No Ct | 16.29 | No Ct | No Ct | 35.88 | No Ct | No Ct | ND | No Ct | ND | 0.3 | |
| PMB620 | NG | Y | | 20.52 | 20.06 | No Ct | 39 | No Ct | No Ct | No Ct | 18.03 | No Ct | ND | No Ct | ND | 0.5 | |
| PMB1075 | NG | Е | | 27.10 | 29.02 | No Ct | 19.74 | 18.28 | No Ct | ND | 1.9 | 7.4 |
| PMB203 | С | С | | 15.56 | 15.34 | No Ct | No Ct | 14.32 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2807 | В | В | | 18.03 | 18.27 | No Ct | 16.81 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB35 | NG | Е | | 21.14 | 21.09 | No Ct | No Ct | No Ct | 29.89 | No Ct | No Ct | 18.93 | 14.45 | No Ct | ND | 0.1 | 8.7 |
| PMB1928 | NG | С | | 18.22 | 20.07 | No Ct | No Ct | 22.94 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 1.8 | |
| PMB675 | W | W | | 18.45 | 17.96 | No Ct | No Ct | No Ct | 17.98 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.5 | |
| PMB2072 | NG | W | | 20.52 | 20.15 | No Ct | No Ct | No Ct | 16.79 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.4 | |
| PMB2913 | NG | С | | 17.98 | 18.69 | No Ct | No Ct | 19 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.7 | |
| PMB3 | NG | Y | | 17.85 | 17.71 | No Ct | 18.16 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2344 | NG | В | | 20.35 | 20.42 | No Ct | 18 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2881 | NG | С | | 20.14 | 20.03 | No Ct | No Ct | 16 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.1 | 4.1 |
| PMB1749 | NG | В | | 18.69 | 18.89 | No Ct | 20 | No Ct | ND | No Ct | ND | 0.2 | 1.3 |
| PMB103 | NG | С | | 18.28 | 17.87 | No Ct | No Ct | 18 | No Ct | No Ct | No Ct | 34.78 | ND | No Ct | ND | 0.4 | 16.5 |
| PMB1024 | NG | В | | 20.22 | 19.93 | No Ct | 21 | No Ct | ND | No Ct | ND | 0.3 | 0.8 |
| PMB1858 | NG | В | | 18.17 | 18.01 | No Ct | 19 | No Ct | ND | No Ct | ND | 0.2 | 0.8 |
| PMB3380 | NG | W | | 21.33 | 20.98 | No Ct | No Ct | No Ct | 18.7 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.3 | 2.6 |
| PMB3176 | В | В | | 17.32 | 17.11 | No Ct | 16.17 | No Ct | No Ct | No Ct | No Ct | 32.49 | ND | No Ct | ND | 0.2 | 15.2 |
| PMB1340 | NG | С | | 18.17 | 18.29 | No Ct | No Ct | 18 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.1 | |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB2238 | NG | Y | | 20.72 | 20.41 | No Ct | 17.78 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB1642 | В | В | | 17.35 | 19.88 | No Ct | 15.64 | No Ct | No Ct | No Ct | No Ct | 37.11 | ND | No Ct | ND | 2.5 | |
| PMB6 | NG | W | | 20.60 | 20.36 | No Ct | No Ct | No Ct | 19.32 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2811 | NG | W | | 20.69 | 20.11 | No Ct | No Ct | No Ct | 21.52 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.6 | |
| PMB2630 | NG | В | | 18.15 | 18.18 | No Ct | 19 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB1779 | NG | Y | | 19.75 | 19.84 | No Ct | No Ct | No Ct | 38.45 | No Ct | 17.76 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB607 | В | В | | 16.95 | 17.05 | No Ct | 15.50 | No Ct | No Ct | 32.33 | No Ct | No Ct | ND | No Ct | ND | 0.1 | 15.4 |
| PMB3563 | NG | Е | | 19.88 | 19.83 | No Ct | 36.00 | No Ct | No Ct | No Ct | No Ct | 20.24 | 17.43 | No Ct | ND | 0.1 | |
| PMB2853 | W | W | | 15.57 | 15.54 | No Ct | No Ct | No Ct | 15.65 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.0 | |
| PMB628 | NG | Y | | 21.58 | 21.15 | No Ct | 21 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB847 | В | В | | 15.68 | 15.40 | No Ct | 15.64 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB1250 | В | В | | 15.06 | 15.00 | No Ct | 15.21 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB442 | Y | W/Y | | 23.46 | 23.23 | No Ct | No Ct | No Ct | 25.68 | No Ct | 28.24 | No Ct | ND | No Ct | ND | 0.2 | 4.8 |
| PMB2661 | NG | С | | 18.43 | 18.02 | No Ct | No Ct | 17 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.4 | |
| PMB2236 | В | В | | 15.53 | 15.61 | No Ct | 15.97 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB3707 | В | В | | 19.03 | 17.33 | No Ct | 18.28 | No Ct | ND | No Ct | ND | 1.7 | |
| PMB2647 | NG | В | | 20.05 | 20.01 | No Ct | 19.78 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB1933 | В | В | | 16.91 | 16.46 | No Ct | 16.65 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB1491 | NG | В | | 19.54 | 19.07 | No Ct | 19.55 | No Ct | ND | No Ct | ND | 0.5 | |
| PMB3306 | NG | В | | 21.03 | 21.03 | No Ct | 21.08 | No Ct | No Ct | No Ct | No Ct | 38.23 | ND | No Ct | ND | 0.0 | |
| PMB3646 | В | В | | 15.87 | 15.83 | No Ct | 15.04 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB2877 | NG | Y | | 22.43 | 22.31 | No Ct | 21.03 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB1190 | NG | Y | | 23.12 | 22.81 | No Ct | 22.17 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB472 | NG | W | | 21.77 | 21.19 | No Ct | No Ct | No Ct | 19.83 | No Ct | No Ct | 38.2 | ND | No Ct | ND | 0.6 | |
| PMB3083 | NG | Z | | 22.04 | 22.02 | No Ct | 37.76 | No Ct | No Ct | No Ct | No Ct | 37.41 | No Ct | 19.54 | 15.81 | 0.0 | |
| PMB513 | В | В | | 15.74 | 15.62 | No Ct | 15.02 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB229 | Y | Y | | 23.02 | 22.62 | No Ct | 24.53 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB3437 | W | W | | 16.09 | 15.84 | No Ct | No Ct | No Ct | 15.7 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2167 | В | В | | 16.44 | 16.56 | No Ct | 16.33 | No Ct | ND | No Ct | ND | 0.1 | |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB3145 | NG | X | | 23.92 | 23.72 | No Ct | No Ct | No Ct | No Ct | 25.19 | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2593 | NG | В | | 22.74 | 22.48 | No Ct | 19.72 | No Ct | No Ct | 38.51 | No Ct | 38.35 | ND | No Ct | ND | 0.3 | |
| PMB1394 | В | В | | 14.56 | 14.82 | No Ct | 15.26 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB2977 | В | В | | 16.21 | 16.06 | No Ct | 16.23 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2025 | NG | В | | 23.76 | 23.27 | No Ct | 21.98 | No Ct | ND | No Ct | ND | 0.5 | |
| PMB1790 | В | В | | 15.52 | 15.56 | No Ct | 15.54 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB2138 | NG | В | | 23.21 | 23.03 | No Ct | 20.92 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB3659 | W | W | | 16.07 | 15.84 | No Ct | No Ct | No Ct | 16.13 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB542 | NG | В | | 20.45 | 20.03 | No Ct | 21.27 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB3405 | NG | W | | 18.84 | 18.47 | No Ct | No Ct | No Ct | 19.06 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.4 | |
| PMB2016 | NG | W | | 16.77 | 17.62 | No Ct | No Ct | No Ct | 18.73 | No Ct | No Ct | 37.43 | ND | No Ct | ND | 0.8 | |
| PMB1806 | NG | W | | 19.12 | 19.04 | No Ct | No Ct | No Ct | 20.05 | 39.78 | No Ct | No Ct | ND | No Ct | ND | 0.1 | |
| PMB318 | X | X | | 15.10 | 15.07 | No Ct | 36.22 | No Ct | No Ct | 15.96 | No Ct | No Ct | ND | No Ct | ND | 0.0 | |
| PMB1736 | X | Y | | 17.28 | 16.14 | No Ct | 36.24 | No Ct | No Ct | No Ct | 17.00 | No Ct | ND | No Ct | ND | 1.1 | |
| PMB3113 | NG | C | | 18.67 | 18.40 | No Ct | 39.78 | 18.31 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.3 | |
| PMB743 | NG | Y | | 17.28 | 17.43 | No Ct | No Ct | 37.62 | No Ct | No Ct | 18.51 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB1442 | NG | В | | 19.51 | 19.46 | No Ct | 19.77 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2869 | В | В | | 16.81 | 16.95 | No Ct | 17.23 | 32.30 | No Ct | No Ct | 35.17 | 38.94 | ND | No Ct | ND | 0.1 | 15.5 |
| PMB2829 | NG | В | | 19.01 | 18.84 | No Ct | 18.39 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB3235 | В | В | | 15.93 | 15.88 | No Ct | 16.19 | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2293 | Y | Y | | 22.69 | 22.42 | No Ct | 38.33 | No Ct | No Ct | No Ct | 24.74 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB553 | NG | Е | | 19.86 | 19.49 | No Ct | No Ct | 34 | No Ct | No Ct | No Ct | 19.56 | 18.35 | No Ct | ND | 0.4 | 14.1 |
| PMB1570 | В | В | | 16.20 | 15.87 | No Ct | 15.86 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB456 | Е | Е | | 22.26 | 22.13 | No Ct | 17.21 | 13.61 | No Ct | ND | 0.1 | |
| PMB3255 | NG | Е | | 17.63 | 19.74 | No Ct | 35.00 | No Ct | No Ct | No Ct | 29 | 16.50 | 15.62 | No Ct | ND | 2.1 | 17.4 |
| PMB560 | NG | С | | 20.50 | 20.17 | No Ct | 30.00 | 19 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.3 | 9.5 |
| PMB2442 | NG | В | | 19.11 | 19.03 | No Ct | 19.44 | No Ct | No Ct | No Ct | No Ct | 29.41 | No Ct | 37.6 | ND | 0.1 | 10.3 |
| PMB1983 | В | В | | 15.56 | 15.32 | No Ct | 15.02 | No Ct | No Ct | No Ct | No Ct | 38.05 | ND | No Ct | ND | 0.2 | |
| PMB173 | NG | Е | | 22.78 | 22.66 | No Ct | 20.26 | 18.09 | No Ct | ND | 0.1 | |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB2359 | NG | В | | 20.29 | 20.31 | No Ct | 20.34 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB819 | В | В | | 19.79 | 19.48 | No Ct | 19.26 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB3123 | NG | С | | 25.30 | 25.15 | No Ct | No Ct | 18 | No Ct | No Ct | No Ct | 29.54 | 37 | No Ct | ND | 0.2 | 11.7 |
| PMB3392 | В | В | | 17.11 | 16.76 | No Ct | 15.65 | No Ct | ND | No Ct | ND | 0.3 | |
| PMB2859 | Y | Y | | 22.81 | 22.29 | No Ct | 24.5 | No Ct | ND | No Ct | ND | 0.5 | |
| PMB1501 | NG | Y | | 29.12 | 29.17 | No Ct | 18.79 | 22.93 | 37 | No Ct | ND | 0.0 | |
| PMB2111 | В | В | | 15.58 | 15.66 | No Ct | 15.95 | 26.12 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.1 | 10.5 |
| PMB2999 | С | С | | 14.28 | 14.89 | No Ct | 33.57 | 14.85 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.6 | 19.3 |
| PMB843 | W | W | | 15.63 | 19.45 | No Ct | No Ct | 33.99 | 20.03 | No Ct | No Ct | 38.17 | ND | No Ct | ND | 3.8 | 18.4 |
| PMB557 | W | W | | 16.24 | 15.71 | No Ct | No Ct | No Ct | 15.92 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.5 | |
| PMB1799 | В | В | | 15.98 | 16.04 | No Ct | 15.96 | No Ct | 35.1 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.1 | |
| PMB158 | W | W | | 16.64 | 16.22 | No Ct | No Ct | No Ct | 16.16 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.4 | |
| PMB2224 | W | W | | 16.31 | 16.08 | No Ct | No Ct | No Ct | 16.26 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB3273 | NG | В | | 17.03 | 17.02 | No Ct | 16.42 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB609 | В | В | | 15.33 | 15.34 | No Ct | 15.64 | No Ct | 31.99 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.0 | 16.7 |
| PMB809 | W | W | | 15.64 | 15.58 | No Ct | 37.05 | No Ct | 15.76 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2474 | W | W | | 15.24 | 15.34 | No Ct | No Ct | 35.15 | 15.55 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.1 | |
| PMB2328 | NG | В | | 19.47 | No Ct | No Ct | 19.74 | No Ct | ND | No Ct | ND | NA | |
| PMB2787 | С | С | | 16.01 | 16.20 | No Ct | 28.8 | 16.45 | 33.44 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | 17.4 |
| PMB2849 | В | В | | 16.22 | 15.99 | No Ct | 16.27 | 36.28 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB3187 | NG | В | | 20.46 | 20.24 | No Ct | 20.85 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB2617 | NG | В | | 15.82 | 16.19 | No Ct | 17.32 | 24.8 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.4 | 9.0 |
| PMB3500 | NG | Y | | 20.38 | 20.24 | No Ct | 31.20 | 37.66 | No Ct | No Ct | 18.6 | No Ct | ND | No Ct | ND | 0.1 | 10.8 |
| PMB1763 | NG | С | | 20.87 | 20.67 | No Ct | No Ct | 18.59 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB463 | NG | Y | | 15.03 | 15.13 | No Ct | 32.29 | 24.84 | 27.79 | No Ct | 16.47 | 38.58 | ND | No Ct | ND | 0.1 | 17.3 |
| PMB842 | NG | W | | 20.96 | 20.39 | No Ct | 36.92 | No Ct | 18.01 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.6 | |
| PMB3214 | NG | Y | | 20.36 | 20.52 | No Ct | 38.26 | No Ct | No Ct | No Ct | 18.57 | No Ct | ND | No Ct | ND | 0.2 | |
| PMB397 | NG | Z | | 22.58 | 22.52 | No Ct | 36.78 | 35.34 | No Ct | No Ct | No Ct | 34.55 | No Ct | 18.81 | 14.42 | 0.1 | 12.0 |
| PMB608 | NG | W | | 20.21 | 19.73 | No Ct | 33.23 | 38.18 | 18.02 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.5 | 13.0 |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB1900 | NG | В | | 15.16 | 15.32 | No Ct | 17.94 | 29.46 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | 14.3 |
| PMB1016 | NG | Е | | 21.23 | 23.43 | No Ct | No Ct | 32.91 | 38.96 | No Ct | No Ct | 17.54 | 16.42 | No Ct | ND | 2.2 | 11.7 |
| PMB3323 | NG | Y | | 20.73 | 20.33 | No Ct | 18.34 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB667 | NG | Z | | 21.61 | 21.47 | No Ct | 35.49 | 35.34 | No Ct | 18.47 | 15.58 | 0.1 | |
| PMB1894 | NG | Е | | 24.09 | 23.84 | No Ct | 22.15 | 21.5 | No Ct | ND | 0.2 | |
| PMB596 | NG | С | | 21.89 | 21.72 | No Ct | 39.87 | 19.97 | 34.17 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | 12.3 |
| PMB1266 | NG | W | | 20.79 | 20.25 | No Ct | No Ct | No Ct | 18.60 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.5 | |
| PMB834 | NG | В | | 20.74 | 20.53 | No Ct | 18.47 | No Ct | 26.28 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | 5.5 |
| PMB1713 | NG | Е | | 22.06 | 24.40 | No Ct | No Ct | 32.77 | No Ct | No Ct | No Ct | 18.09 | 19.25 | No Ct | ND | 2.3 | 10.7 |
| PMB2429 | NG | Z | | 21.95 | 21.82 | No Ct | 28.87 | No Ct | No Ct | 19.25 | 19.02 | 0.1 | 6.9 |
| PMB2607 | NG | W | | 20.64 | 20.29 | No Ct | 38.01 | No Ct | 19.37 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.4 | |
| PMB2023 | NG | С | | 22.28 | 21.82 | No Ct | 34.82 | 20.5 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.5 | 12.5 |
| PMB273 | NG | W | | 12.07 | 9.73 | No Ct | 24.45 | 23.71 | 11.19 | No Ct | No Ct | No Ct | ND | No Ct | ND | 2.3 | 12.5 |
| PMB1245 | NG | Y/C | | 16.49 | 16.65 | No Ct | 39.43 | 24.78 | No Ct | No Ct | 23.47 | No Ct | ND | No Ct | ND | 0.2 | 1.3 |
| PMB1652 | NG | В | | 21.31 | 21.33 | No Ct | 19.84 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB3521 | NG | В | | 20.37 | 20.17 | No Ct | 18.66 | No Ct | No Ct | No Ct | No Ct | 32.62 | ND | No Ct | ND | 0.2 | 12.2 |
| PMB1972 | NG | Y | | 21.78 | 21.38 | No Ct | 36.29 | No Ct | No Ct | No Ct | 19.96 | No Ct | ND | No Ct | ND | 0.4 | |
| PMB981 | NG | Е | | 20.86 | 20.53 | No Ct | 16.79 | 15.89 | No Ct | ND | 0.3 | |
| PMB2216 | NG | Е | | 22.32 | 24.64 | No Ct | 20.13 | 16.06 | No Ct | ND | 2.3 | |
| PMB1343 | NG | В | | 21.04 | 20.45 | No Ct | 18.94 | No Ct | ND | No Ct | ND | 0.6 | |
| PMB739 | NG | W | | 20.26 | 19.66 | No Ct | No Ct | No Ct | 17.09 | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.6 | |
| PMB1363 | NG | Е | | 21.66 | 21.60 | No Ct | 34.2 | No Ct | No Ct | No Ct | No Ct | 18.82 | 15.43 | No Ct | ND | 0.1 | 12.5 |
| PMB101 | NG | Y | | 21.77 | 21.74 | No Ct | 20.33 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB1359 | NG | Е | | 23.01 | 25.01 | No Ct | 21.31 | 19.57 | No Ct | ND | 2.0 | |
| PMB3150 | NG | С | | 21.83 | 21.53 | No Ct | 35.9 | 19.45 | No Ct | No Ct | No Ct | 36.48 | ND | No Ct | ND | 0.3 | |
| PMB275 | NG | Y | | 23.07 | 23.04 | No Ct | No Ct | No Ct | 39.72 | No Ct | 24.25 | No Ct | ND | No Ct | ND | 0.0 | |
| PMB1030 | NG | Е | | 27.57 | 29.96 | No Ct | 29.03 | 28.31 | No Ct | ND | 2.4 | |
| PMB3619 | NG | W | | 22.62 | 22.09 | No Ct | No Ct | No Ct | 23.7 | No Ct | No Ct | 38.38 | ND | No Ct | ND | 0.5 | |
| PMB1598 | NG | С | | 15.52 | 15.61 | No Ct | 37.11 | 10.50 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.1 | |

| Strain | Group (SASG) | GGroup rt-PCR | cnl PCR | porA Ct | ctrA Ct | NmA Ct | NmB Ct | NmC Ct | NmW Ct | NmX Ct | NmY Ct | NmE Ct* | NmE Ct | NmZ Ct* | NmZ Ct | porA -ctrA | Delta Ct |
|---------|-----------------|------------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|---------------|-------------|
| PMB1871 | NG | С | | 22.88 | 22.73 | No Ct | No Ct | 23.47 | No Ct | No Ct | No Ct | No Ct | ND | No Ct | ND | 0.2 | |
| PMB417 | NG | Е | | 21.88 | 23.22 | No Ct | No Ct | No Ct | 33.03 | No Ct | No Ct | 17.54 | 15.43 | No Ct | ND | 1.3 | 11.1 |
| PMB879 | NG | Е | | 13.97 | 15.24 | No Ct | 18.42 | 18.07 | No Ct | ND | 1.3 | |

NG: nongroupable using SASG assay

NGG: nongenogroupable using rt-PCR assays

cnl: positive PCR product (<400bp) from *tex* to *galE*

NR: negative cnl PCR and negative rt-PCR

ND: not done

Delta Ct: difference in Ct values between *porA* and genogrouping assay with Ct of 30–35.

^{*:} Results with MenE and MenZ specific primer-probes located at 5'end of ctrA