**TABLE S2.** Primers used in this study.

| Primer | Sequence (5'-3') | Description or reference | Polymerase used for PCR | $MgCl_2$ concentration | PCR program |
|---|---|---|---|---|---|
| **For amplification and sequencing of *napA* (MPTP_0420 and MPTP_0421) of ATCC 35311 and its corresponding genes of other strains** | | | | | |
| MPTP0420-0421F1 | GTCACAATGATTCATCTTGC | Used for amplification and sequencing. This primer was also used for preparation of *napA* probe (see below). | Ex Taq DNA polymerase (Takara) | 1.5 mM | 95°C 2min - 95°C 20sec, 55°C 10sec, 72°C 1min (30 cycles) - 72°C 2min |
| MPTP0420-0421R1 | TGACTTTTCAAGGGGTGAGA | Used for amplification and sequencing. This primer was also used for preparation of *napA* probe (see below). | | | |
| MPTP0420-0421F2 | CAGCAAGATAGGACATTCCA | Used only for sequencing. | | | |
| MPTP0420-0421R2 | TGGAATGTCCTATCTTGCTG | Used only for sequencing. | | | |
| **For amplification and sequencing of *nhaP* (MPTP_1078) of ATCC 35311 and its corresponding gene of other strains** | | | | | |
| MPTP1078F1 | TTAGAAGCTAAATGGGCACAATGT | Used for amplification and sequencing. | Ex Taq DNA polymerase (Takara) | 1.5 mM | 95°C 2min - 95°C 20sec, 55°C 10sec, 72°C 2min (32 cycles) - 72°C 7min |
| MPTP1078R1 | CGAATGAATGTTAAAGGAGAGGTG | Used for amplification and sequencing. | | | |
| MPTP1078F2 | TGTGTTGGCTGGACGCTACA | Used only for sequencing. | | | |
| MPTP1078F3 | GCCGCTGTAGTTGCCGGTGT | Used only for sequencing. | | | |
| MPTP1078R2 | GATGACCGTCGTATTTTCCG | Used only for sequencing. | | | |
| MPTP1078R3 | TGTGTCCATTTCTTGTTCAC | Used only for sequencing. | | | |
| **For amplification and sequencing of *ctaM* (MPTP_1579) of ATCC 35311 and its corresponding gene of other strains** | | | | | |
| MPD5_0470F | AAGACTGCAGCTAAACTGTGGAAAAGGGGA | Used for amplification and sequencing. This primer was also used for construction of pDAT561CtaM (see below). PstI site is underlined. | Ex Taq DNA polymerase (Takara) | 1.5 mM | 95°C 2min - 95°C 20sec, 55°C 10sec, 72°C 2min (32 cycles) - 72°C 7min |
| MPD5_0470R | AACTCTGCAGCTAATGAGGATTATCTA | Used for amplification and sequencing. This primer was also used for construction of pDAT561CtaM (see below). PstI site is underlined. | | | |
| MPTP1579F2 | GAACCAGATACCTTCTGATG | Used only for sequencing. | | | |
| MPTP1579F3 | AGAAACTCTAGCAAGAGTGG | Used only for sequencing. | | | |
| MPTP1579F4 | CTGGTGATAATCCAATCACT | Used only for sequencing. | | | |
| MPTP1579F5 | TTTTGGCTCTACGTCCAAGT | Used only for sequencing. | | | |
| MPTP1579R2 | ACAAGGCGTTTTCAGGATAG | Used only for sequencing. | | | |
| **For amplification and sequencing of *ctaP* (MPTP_1629) of ATCC 35311 and its corresponding gene of other strains** | | | | | |
| MPTP1629F5 | CATGCTATAGTGAAAGAAGATAGC | Used for amplification and sequencing. | Ex Taq DNA polymerase (Takara) | 1.5 mM | 95°C 2min - 95°C 20sec, 55°C 10sec, 72°C 2min (30 cycles) - 72°C 5min |
| MPTP1629R6 | CACCCACACTCCTTCATCCT | Used for amplification and sequencing. | | | |
| MPTP1629F1 | GGGGGCTTTTGACGTATTGG | Used only for sequencing. | | | |
| MPTP1629F3 | TTGCAGATGGATTACCAGGA | Used only for sequencing. | | | |
| MPTP1629F4 | GATACAATGACCGATGAAGC | Used only for sequencing. | | | |
| MPTP1629R1 | CATTCACATTCGCACCAATG | Used only for sequencing. | | | |
| MPTP1629R3 | ACCAACAGTAATTACACGCA | Used only for sequencing. | | | |
| MPTP1629R4 | TCTACGGATAATTGCATGCT | Used only for sequencing. | | | |
| MPTP1629R5 | ACTGGAATCATTGCTCCAAC | Used only for sequencing. | | | |
| **For preparation of *napA* probe** | | | | | |
| MPTP0420-0421F1 | GTCACAATGATTCATCTTGC | | Ex Taq DNA polymerase (Takara) | 2.5 mM | 95°C 2min - 95°C 20sec, 55°C 10sec, 72°C 1min (35 cycles) - 72°C 2min |
| MPTP0420-0421R1 | TGACTTTTCAAGGGGTGAGA | | | | |
| **For construction of pMX2** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| pMX-F | CAATCTCGAGGACATCTGCCAGCTCTCG | For amplification of the replication origin, *malX* promoter, and multiple cloning sites from pMX1. XhoI site is underlined. | iProof (Bio-Rad) | 1.5 mM | 98°C 1min - 98°C 20sec, 58°C 10sec, 72°C 3min (30 cycles) - 72°C 5min |
| pMX-R | TCACCTCGAGATCTCGGTGATGACGGTG | For amplification of the replication origin, *malX* promoter, and multiple cloning sites from pMX1. XhoI site is underlined. | | | |
| catF2 | CGATCTCGAGTCACCGAACTAGAGCTTG | For amplification of the *cat* gene from pSET6s. XhoI site is underlined. | iProof (Bio-Rad) | 1.5 mM | 98°C 1min - 98°C 20sec, 58°C 10sec, 72°C 3min (30 cycles) - 72°C 5min |
| catR2 | AGTTCTCGAGTTTCCGATAATTCGATGG | For amplification of the *cat* gene from pSET6s. XhoI site is underlined. | | | |
| **For preparation of *cat* probe** | | | | | |
| catIF | ATAGCGACGGAGAGTTAGGT | | Ex Taq DNA polymerase (Takara) | 2.5 mM | 95°C 2min - 95°C 20sec, 55°C 10sec, 72°C 1min (35 cycles) - 72°C 2min |
| catIR | CTGACAATTCCTGAATAGAG | | | | |
| **For identification of *M. plutonius*** | | | | | |
| *M. plutonius*-specific primer 1 | GAAGAGGAGTTAAAAGGCGC | Reference 13 | Ex Taq DNA polymerase (Takara) | 2.0 mM | 95°C 1min - 93°C 1min, 55°C 30sec, 72°C 1min (30 cycles) - 72°C 5min |
| *M. plutonius*-specific primer 2 | TTATCTCTAAGGCGTTCAAAGG | Reference 13 | | | |
| **For construction of pMX2lacZ** | | | | | |
| LacZ1 | GCAGACGCGTCGACGTCATATGGATC | A part of BamHI site is underlined. | iProof (Bio-Rad) | 1.5 mM | 98°C 2min - 98°C 10sec, 55°C 10sec, 72°C 2min (35 cycles) - 72°C 5min |
| LacZ2.2 | GGGAATTCCGGGAAAAACGGGAAGTAGGCTCC | EcoRI site is underlined. | | | |
| **For construction of pDAT628NapA** | | | | | |
| MPTP0420-0421F3 | AGCTCTGCAGTTTATAAAAGAAAGAGGATG | PstI site is underlined. | iProof (Bio-Rad) | 1.5 mM | 98°C 1min - 98°C 20sec, 52°C 10sec, 72°C 1min (30 cycles) - 72°C 2min |
| MPTP0420-0421R3 | AATCAAGATTTATTTAGTGG | | | | |
| **For construction of pDAT561CtaP** | | | | | |
| MPD5_0425F | AGATCTGCAGTATATAATAGAAGGAAAATGGGGG | PstI site is underlined. | iProof (Bio-Rad) | 1.5 mM | 98°C 2min - 98°C 10sec, 55°C 10sec, 72°C 2min (30 cycles) - 72°C 5min |
| MPD5_0425R | TCTAGGATCCATTTAATCATTTTCATCATTGGGT | BamHI site is underlined. | | | |
| **For construction of pDAT561CtaM** | | | | | |
| MPD5_0470F | AAGACTGCAGCTAAACTGTGGAAAAGGGGA | PstI site is underlined. | iProof (Bio-Rad) | 1.5 mM | 98°C 2min - 98°C 10sec, 55°C 10sec, 72°C 2min (30 cycles) - 72°C 5min |
| MPD5_0470R | AACTCTGCAGCTAATGAGGATTATCTA | PstI site is underlined. | | | |
| **For construction of pDAT561NhaP** | | | | | |
| MPD5_0870F | GAAACTGCAGACATGTATTGGTAAGAAAGT | PstI site is underlined. | iProof (Bio-Rad) | 1.5 mM | 98°C 2min - 98°C 10sec, 52°C 10sec, 72°C 2min (35 cycles) - 72°C 5min |
| MPD5_0870R | TTCTCTGCAGTCCCTTTTCCTTCTATCCAT | PstI site is underlined. | | | |