**Table S5. Bacterial strains used in this study.**

| Bacterial Strains | Source | Identifier |
|---|---|---|
| *E. coli* S17-1 lambda pir | ATCC | ATCC BAA-2428 |
| *B. thetaiotaomicron* VPI-5482 | ATCC | ATCC 29148 |
| *B. thetaiotaomicron* VPI-5482 *tdk* | PMID: 18611383 | GT23 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT4338* | PMID: 27729509 | NS364 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT2167* | This study | GT1309 |
| *B. thetaiotaomicron* VPI-5482 *tdk Δ22bp* | This study | WH311 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT4338 pNBU2-tetQ::P(BT4338)-BT4338-4XGly-HA* | This study | GT1481 |
| *B. thetaiotaomicron* VPI-5482 *tdk Δ22bp ΔBT4338 pNBU2-tetQ::P(BT4338)-BT4338-4XGly-HA* | This study | WH335 |
| *B. thetaiotaomicron* VPI-5482 *tdk BT2167-FLAG::pKNOCK-tetQ* | This study | GT1301 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT4338 BT2167-FLAG::pKNOCK-tetQ* | This study | GT1308 |

| | | |
|---|---|---|
| *B. thetaiotaomicron* VPI-5482 *tdk Δ22bp BT2167-FLAG::pKNOCK-tetQ* | This study | WH389 |
| *B. thetaiotaomicron* VPI-5482 *tdk pNBU2-tetQ::BC01* | This study | GT478 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT2167 pNBU2-tetQ::BC03* | This study | WH148 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT4338 pNBU2-tetQ::BC06* | This study | WH150 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT22bp pNBU2-tetQ::BC21* | This study | WH324 |
| *Bacteroides ovatus* NCTC11153 | ATCC | ATCC 8483 |
| *Bacteroides ovatus* NCTC11153 *ΩBovatus_RS22425::pKNOCK-tetQ* | This study | WH275 |
| *B. thetaiotaomicron* VPI-5482 *tdk pNBU2-tetQ* | This study | GT1009 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT4338 pNBU2-tetQ* | PMID: 27729509 | NS432 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT4338 pNBU2-tetQ:: P(BT4338)-BT4338-HA* | PMID: 27729509 | NS433 |
| *B. thetaiotaomicron* VPI-5482 *tdk pNBU2-tetQ::P(BT4338)-BT4338* | This study | GT1498 |
| *B. thetaiotaomicron* VPI-5482 *tdk ΔBT0700 ΔBT3998* | This study | GT1181 |