**Table S4.** Strains used in this study

|  |  |  |
| --- | --- | --- |
| Strain | Parent strain | Description |
| *sacB* | Wild type (DSM 12444) | Sucrose sensitivity gene deleted (Kontur et al., 2018) |
| Δ*ligL* | *sacB* | Markerless deletion of *ligL* |
| Δ*ligN* | *sacB* | Markerless deletion of *ligN* |
| Δ*ligD* | *sacB* | Markerless deletion of *ligD* |
| Δ*ligO* | *sacB* | Markerless deletion of *ligO* |

**Table S5.** Plasmids used to inactivate indicated *lig* genes in this study (Cecil et al. 2018)

|  |  |  |
| --- | --- | --- |
| Plasmid Name | Base Plasmid\* | Gene deletion |
| pJM307 | pAK405 | ligD |
| pJM311 | pAK405 | ligO |
| pJM312 | pAK405 | ligN |
| pJM323 | pAK405 | ligL |

\* Kaczmarczyk et al. 2012

**Table S6.** Primers for confirming *lig* deletion mutants (Cecil et al. 2018)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Forward Primer | Reverse Primer | Target |
| 01025 | TCAGGTCCACCAGTTCGCCATC | GTCTCTATCGCGTTGACCGACTGG | ligD |
| 03960 | ACAAGAACTTCGGCCTCTATCGTGAC | GTGAAGCTCGACGTGACCAATCG | ligO |
| 03965 | CGCGAACTTGGTGGTATTGTAGATGC | CGAAAAGGCGCGAGTGATCTTCTTC | ligN |
| 09390 | GCTATGCCGAATTTGCCCTGAC | CTGTCGGGATATGCCATCTACATCTGG | ligL |

**References:**

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