**Table S1 – Comparison of growth and production in *E. coli* W and** ***E. coli* W Δ*ldhA* Δ*adhE* Δ*pta* Δ*frdA* (Δ4).** Media contained 5 g l-1 acetate and 10 g l-1 yeast extract and cultures were inoculated at OD600 = 0.5. Means and standard deviations were calculated from biological triplicates.

|  |  |  |
| --- | --- | --- |
| **Strain** | ***E. coli* W** | ***E. coli* W Δ4** |
| OD [-] | 5.3 ± 0.1 | 5.8 ± 0.3 |
| diols [ g l-1] | 0.20 ± 0.01 | 0.67 ± 0.03 |

**Table S2 – Diol production from acetate and other amino acids in *E. coli* W Δ*ldhA* Δ*adhE* Δ*pta* Δ*frdA.*** Media contained 5 g l-1 acetate and 0.88 g l-1 of the corresponding amino acid and cultures were inoculated at OD600 = 0.5. Means and standard deviations were calculated from biological triplicates.

|  |  |  |  |
| --- | --- | --- | --- |
| **amino acid** | **lysine** | **methionine** | **arginine** |
| OD [-] | 2.5 ± 0.6 | 2.2 ± 0.1 | 2.5 ± 0.8 |
| diols [ g l-1] | 0.09 ± 0.03 | 0.06 ± 0.01 | 0.10 ± 0.01 |