|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Strain** | **Process** | **C source** | **SA**  **(g/L)** | **rSA**  **(g/Lh)** | **Working volume**  **(L)** | **Reference** |
| *M. succiniciproducens*  PALK | Fed-batch (high cell density inoculum) | Glucose, Glyerol | 134.25 | 21.3 | 2.5 | Ahn et al., 2020 |
| *E.coli* AF P111 overexpressing pyc from *Rhizobium etli* | Dual phase | Glucose | 99.2 | 1.3 | 1.5 | Vemuri et al., 2002 |
| *C. glutamicum* BOL-3 (overexpressing glyceraldehyde 3-phosphate dehydrogenase gene gapA) | Anaerobic fed-batch  (high cell density inoculum) | Glucose | 134 | 2.48 | 0.45 | Litsanov et al., 2012 |
| *Pichia kudriavzevii* 13723 (Bioamber) | Aerobic Batch, pH 3, 10 %CO2 | Glucose | 48.2 | 0.97 | - | Rush et al., 2014 |
| *Escherichia coli KJ122 ∆galP (Myriant)* | Anaerobic batch | Glucose  Xylose | 96.0 | 0.80 | - | Grabar et al., 2012 |

Supplementary Table 1- SA production titers and productivities obtained by genetically modifying natural and non-natural producer strains grown on semi-defined and defined media.