Table S2. List of annotated enzymes by NCBI and RAST involved in carbohydrate metabolism (glycolysis, pentose phosphate pathway, pyruvate metabolism and TCA cycle).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Enzyme | EC number | Locus tag from NCBI | RAST-ID |
| 1 | Glucokinase | EC 2.7.1.2 | BSQ50\_07330 | peg\_1459 |
| 2 | Glucose-6-phosphate isomerase  | EC 5.3.1.9 | BSQ50\_08580 | peg\_1678 |
| 3 | 6-phosphofructokinase | EC 2.7.1.11 | BSQ50\_06330 | peg\_1260 |
| 4 | Fructose-bisphosphate aldolase  | EC 4.1.2.13 | BSQ50\_04840BSQ50\_07790 | peg\_956peg\_1552 |
| 5 | Triose-phosphate isomerase  | EC 5.3.1.1 | BSQ50\_02645 | peg\_510 |
| 6 | Glyceraldehyde 3-phosphate dehydrogenase  | EC 1.2.1.12 | BSQ50\_02635 | peg\_508 |
| 7 | Phosphoglycerate kinase  | EC 2.7.2.3 | BSQ50\_02640 | peg\_509 |
| 8 | Phosphoglycerate mutase  | EC 5.4.2.1 | BSQ50\_02110BSQ50\_09155 | peg\_403peg\_1797 |
| 9 | Enolase | EC 4.2.1.11 | BSQ50\_02650BSQ50\_05885 | peg\_511peg\_1168 |
| 10 | Pyruvate kinase  | EC 2.7.1.40 | BSQ50\_06325 | peg\_1259 |
| 11 | (L/D) Lactate dehydrogenase | EC 1.1.1.27/28 | BSQ50\_01780BSQ50\_01955BSQ50\_05430BSQ50\_06640BSQ50\_08630 | peg\_342peg\_379peg\_1074peg\_1321peg\_1688 |
| 12 | Glucose-6-phosphate dehydrogenase  | EC 1.1.1.49 | BSQ50\_02990 | peg\_579 |
| 13 | 6-phosphogluconolactonase | EC 3.1.1.31 | BSQ50\_02805 | peg\_542 |
| 14 | Phosphogluconate dehydrogenase  | EC 1.1.1.44 | BSQ50\_06855BSQ50\_10385 | peg\_1363peg\_2045 |
| 15 | Ribulose-phosphate 3-epimerase  | EC 5.1.3.1 | BSQ50\_04865BSQ50\_07245 | peg\_961peg\_1441 |
| 16 | Phosphoketolase | EC 4.1.2.9 | BSQ50\_09315 | peg\_1830 |
| 17 | Acetate kinase  | EC 2.7.2.1 | BSQ50\_01685BSQ50\_04570BSQ50\_07705BSQ50\_08365BSQ50\_09355 | peg\_325peg\_901peg\_1535peg\_1633peg\_1838 |
| 18 | Phosphate acetyltransferase  | EC 2.3.1.8 | BSQ50\_02695 | peg\_520 |
| 19 | Acetaldehyde dehydrogenase | EC 1.2.1.10 | BSQ50\_04565 | peg\_900 |
| 20 | Alcohol dehydrogenase  | EC 1.1.1.1 | BSQ50\_00575BSQ50\_04565BSQ50\_05330BSQ50\_09365BSQ50\_09675BSQ50\_09870 | peg\_116peg\_900peg\_1053peg\_1840peg\_1902peg\_1943 |
| 21 | Citrate lyase | EC 4.1.3.6 | BSQ50\_03225BSQ50\_03230 | peg\_625peg\_626 |
| 22 | Oxaloacetate decarboxylase  | EC 4.1.1.3 | BSQ50\_03205 | peg\_621 |
| 23 | Pyruvate oxidase | EC 1.2.3.3 | BSQ50\_00690BSQ50\_08185 | peg\_141peg\_1616 |
| 24 | Pyruvate dehydrogenase | EC 1.2.4.1 | BSQ50\_00245BSQ50\_00250 | peg\_49peg\_50 |
| 25 | Pyruvate formate lyase  | EC 2.3.1.54 | BSQ50\_04390BSQ50\_09420 | peg\_863peg\_1851 |
| 26 | Acetolactate synthase  | EC 2.2.1.6 | BSQ50\_00550BSQ50\_01140 | peg\_112peg\_231 |
| 27 | α󠇌-acetolactate decarboxylase  | EC 4.1.1.5 | BSQ50\_10370 | peg\_2042 |
| 28 | Acetoin reductase | EC 1.1.1.4 | BSQ50\_05200 | peg\_1026 |
| 29 | Ribose-5-phosphate isomerase  | EC 5.3.1.6 | BSQ50\_02120BSQ50\_04870BSQ50\_08850BSQ50\_09890 | peg\_405peg\_962peg\_1732peg\_1947 |
| 30 | Transketolase | EC 2.2.1.1 | BSQ50\_03545 | peg\_688 |