**Table 1 The pathway enrichment of differential metabolites in the two *B. sorokiniana* strains**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pathway | Total | Hits | Raw p | Impact |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | Vitamin B6 metabolism |  | 3 | 0.029905 | 0 | | 11 | 2 | 0.029905 | 0 |
| Thiamine metabolism | 10 | 2 | 0.13402 | 0.5 |
| Beta-Alanine metabolism | 12 | 2 | 0.18098 | 0.25641 |
| Pantothenate and CoA biosynthesis | 16 | 2 | 0.27976 | 0.27027 |
| Isoquinoline alkaloid biosynthesis | 6 | 1 | 0.33283 | 0.5 |
| Biotin metabolism | 7 | 1 | 0.37468 | 1 |
| Phenylalanine, tyrosine and tryptophan biosynthesis | 22 | 2 | 0.42533 | 0.04121 |
| Ascorbate and aldarate metabolism | 14 | 1 | 0.6124 | 0 |
| Tyrosine metabolism | 18 | 1 | 0.70502 | 0.27273 |
| Arginine and proline metabolism | 37 | 2 | 0.70487 | 0.14771 |
| Diterpenoid biosynthesis | 19 | 1 | 0.72452 | 0 |
| Pyrimidine metabolism | 39 | 2 | 0.73605 | 0.05086 |
| Butanoate metabolism | 20 | 1 | 0.74276 | 0 |
| Pyruvate metabolism | 20 | 1 | 0.74276 | 0 |
| Citrate cycle (TCA cycle) | 20 | 1 | 0.74276 | 0.01166 |
| Ubiquinone and other terpenoid-quinone biosynthesis | 22 | 1 | 0.77573 | 0 |
| Glycolysis or Gluconeogenesis | 25 | 1 | 0.81752 | 0.00772 |
| Glycerophospholipid metabolism | 25 | 1 | 0.81752 | 0.0504 |
| Aminoacyl-tRNA biosynthesis | 67 | 3 | 0.82813 | 0 |
| Glutathione metabolism | 26 | 1 | 0.82966 | 0.41249 |
| Glycine, serine and threonine metabolism | 29 | 1 | 0.86151 | 0 |
| Phenylpropanoid biosynthesis | 31 | 1 | 0.8794 | 0 |
| Purine metabolism | 55 | 2 | 0.88688 | 0.00237 |
| Porphyrin and chlorophyll metabolism | 33 | 1 | 0.895 | 0.04184 |
| Valine, leucine and isoleucine degradation | 34 | 1 | 0.90204 | 0.10299 |
| Cysteine and methionine metabolism | 35 | 1 | 0.90861 | 0.08152 |
| Amino sugar and nucleotide sugar metabolism | 37 | 1 | 0.92408 | 0 |

In particular, the Total is the total number of compounds in the pathway; the Hits is the actually matched number from the user uploaded data; the Raw p is the original p value calculated from the enrichment analysis; the Impact is the pathway impact value calculated from pathway topology analysis.