Table 2 | Gene expression profile in methane-grown cells of $\emph{M. trichosporium}$ OB3b.

| Gene ID | Predicted function | Gene | Replicate 1 | Replicate 2 |
|-------------------|--|---------|-------------|-------------|
| METHANE AND METH | IANOL OXIDATION | | | |
| METTOv1_1270003 | Particulate methane monooxygenase subunit C | ртоС | 123026 | 127241 |
| METTOv1_1270002 | Particulate methane monooxygenase subunit A | pmoA | 37102 | 31813 |
| METTOv1_1270001 | Particulate methane monooxygenase subunit B | ртоВ | 27371 | 22917 |
| METTOv1_310040 | Particulate methane monooxygenase subunit C2 | pmoC2 | 532 | 492 |
| METTOv1_50081 | Soluble methane monooxygenase alpha subunit | mmoX | 9 | 8 |
| METTOv1_50082 | Soluble methane monooxygenase beta subunit | mmoY | 13 | 9 |
| METTOv1_50084 | Soluble methane monooxygenase gamma subunit | mmoZ | 20 | 19 |
| METTOv1_240014 | PQQ-dependent methanol dehydrogenase | mxaF | 15313 | 13760 |
| METTOv1_240011 | PQQ-dependent methanol dehydrogenase | mxal | 24552 | 28474 |
| METTOv1_240012 | Cytochrome c class I | mxaG | 5712 | 6117 |
| METTOv1_240013 | Extracellular solute-binding protein family 3 | mxaJ | 1942 | 1838 |
| METTOv1_240001 | Putative methanol utilization control sensor protein | mxaY | 36 | 41 |
| METTOv1_240002 | Putative two-component response regulator | mxaB | 303 | 317 |
| METTOv1_240003 | MxaH protein, involved in methanol oxidation | mxaH | 399 | 391 |
| METTOv1_240004 | MxaD protein, involved in methanol oxidation | mxaD | 1137 | 1077 |
| METTOv1_240005 | von Willebrand factor type A, involved in methanol oxidation | mxaL | 191 | 201 |
| METTOv1_240006 | Protein of unknown function, involved in methanol oxidation | mxaK | 124 | 132 |
| METTOv1_240007 | von Willebrand factor type A, involved in methanol oxidation | mxaC | 144 | 141 |
| METTOv1_240008 | MxaA protein, involved in methanol oxidation | mxaA | 137 | 127 |
| METTOv1_240009 | MxaS protein, involved in methanol oxidation | mxaS | 202 | 167 |
| METTOv1_240010 | ATPase, involved in methanol oxidation | mxaR | 563 | 538 |
| METTOv1_110056 | Coenzyme PQQ biosynthesis protein A | pqqA | 11857 | 13927 |
| METTOv1_160001 | Coenzyme PQQ biosynthesis protein E | pqqE | 166 | 161 |
| METTOv1_160002 | Coenzyme PQQ biosynthesis protein PqqC/D | pqqC/D | 372 | 344 |
| METTOv1_160003 | Coenzyme PQQ biosynthesis protein B | pqqB | 306 | 313 |
| METTOv1_20046 | Coenzyme PQQ biosynthesis protein F | pqqF | 183 | 185 |
| METTOv1_20047 | Coenzyme PQQ biosynthesis protein G | pqqG | 157 | 142 |
| METTOv1_610028 | Aldehyde dehydrogenase | aldh | 37 | 37 |
| METTOv1_290006 | Aldehyde oxidase | aor | 45 | 38 |
| METTOv1_100046 | Aldehyde dehydrogenase | aldh-F7 | 7 | 9 |
| FORMALDEHYDE OXI | DATION | | | |
| METTOv1_40010 | Methenyltetrahydromethanopterin cyclohydrolase | mch | 393 | 312 |
| METTOv1_40011 | Tetrahydromethanopterin-linked C1 transfer pathway protein. Orf5 | orf5 | 128 | 111 |
| METTOv1_40012 | Tetrahydromethanopterin-linked C1 transfer pathway protein, Orf7 | orf7 | 73 | 72 |
| METTOv1_40013 | Formaldehyde activating enzyme | fae1 | 24353 | 24787 |
| METTOv1_40014 | Formaldehyde activating enzyme | fae 1-2 | 4024 | 3676 |
| METTOv1_840013 | Formaldehyde activating enzyme homolog | fae2 | 535 | 581 |
| METTOv1_40015 | Tetrahydromethanopterin-linked C1 transfer pathway protein | orf17 | 38 | 45 |
| METTOv1_110058 | Tetrahydromethanopterin formyltransferase, subunit C | fhcC | 535 | 453 |
| METTOv1_110059 | Tetrahydromethanopterin formyltransferase, subunit D | fhcD | 496 | 470 |
| METTOv1_110060 | Tetrahydromethanopterin formyltransferase, subunit A | fhcA | 591 | 546 |
| METTOv1_110061 | Tetrahydromethanopterin formyltransferase, subunit B | fhcB | 620 | 570 |
| METTOv1_560001 | Tetrahydromethanopterin -linked C1 transfer pathway protein | orf9 | 172 | 167 |
| METTOv1_560002 | Methylenetetrahydrofolate dehydrogenase (NAD) | mtdB | 688 | 607 |
| METTOv1_440045 | Ribofuranosylaminobenzene 5'-phosphate synthase | mptG | 94 | 80 |
| FORMATE OXIDATION | | | | |
| METTOv1_630016 | Transcriptional regulator, LysR family | fdsR | 52 | 39 |
| METTOv1_630017 | NAD-linked formate dehydrogenase, subunit G | fdsG | 672 | 608 |
| METTOv1_630018 | NAD-linked formate dehydrogenase, subunit B | fdsB | 585 | 531 |
| | | | | |
| METTOv1_630019 | NAD-linked formate dehydrogenase, subunit A | fdsA | 593 | 554 |

(Continued)