**Table S1.** List of upregulated genes (≥ 2-fold, FDR < 0.05) in Δ*Poset2* compared with WT with significantly enriched GO terms (GO category: molecular function) when cultivated for 24 h on the condition of cellulose medium.

|  |  |  |  |
| --- | --- | --- | --- |
| **GO-ID** | **Term** | **Gene ID**  **(locus\_tag)** | **Description of putative *P. oxalicum* ORF** |
| GO:0030248 | Cellulose binding | PDE\_00014 | Exoglucanase 1 |
| PDE\_00015 | Putative beta-xylosidase |
| PDE\_00016 | Alpha-L-arabinofuranosidase axhA-2 |
| PDE\_01302 | Endoglucanase E |
| PDE\_02101 | Probable endo-1,4-beta-xylanase B |
| PDE\_02102 | Expansin-B1 |
| PDE\_02514 | Alpha-galactosidase 6 |
| PDE\_02682 | Endo-1,4-beta-xylanase A |
| PDE\_06067 | Arabinoxylan arabinofuranohydrolase |
| PDE\_06438 | Probable mannan endo-1,4-beta-mannosidase E |
| PDE\_07124 | Probable 1,4-beta-D-glucan cellobiohydrolase C |
| PDE\_09226 | Probable endo-beta-1,4-glucanase B |
| PDE\_09278 | Acetylxylan esterase A |
| GO:0004190 | Aspartic-type endopeptidase activity | PDE\_01021 | Probable aspartic-type endopeptidase opsB |
| PDE\_04768 | Vacuolar protease A |
| PDE\_07344 | Aspartic protease penicillopepsin |
| PDE\_07927 | Aspartic protease penicillopepsin, PepB |
| PDE\_07930 | Probable aspartic-type endopeptidase opsB |
| PDE\_07933 | Aspergillopepsin-2 |
| PDE\_08305 | Aspergillopepsin A-like aspartic endopeptidase |
| PDE\_09250 | Aubfamily A1A non-peptidase homologues |
| GO:0008810 | Cellulase activity | PDE\_02886 | Xyloglucan-specific endo-beta-1,4-glucanase A |
| PDE\_05193 | Probable endo-beta-1,4-glucanase B |
| PDE\_06438 | Probable mannan endo-1,4-beta-mannosidase E |
| PDE\_06439 | Endoglucanase-1 |
| PDE\_07124 | Probable 1,4-beta-D-glucan cellobiohydrolase C |
| PDE\_09014 | Xyloglucan-specific endo-beta-1,4-glucanase A |
| PDE\_09226 | Probable endo-beta-1,4-glucanase B |
| GO:0046933 | Proton-transporting ATP synthase activity, rotational mechanism | PDE\_01144 | ATP synthase subunit alpha, mitochondrial |
| PDE\_02994 | ATP synthase subunit gamma, mitochondrial |
| PDE\_03014 | ATP synthase subunit delta, mitochondrial |
| PDE\_04833 | V-type proton ATPase 16 kDa proteolipid subunit |
| PDE\_06476 | ATP synthase subunit alpha, mitochondrial |
| PDE\_06934 | ATP synthase subunit f, mitochondrial |
| PDE\_07279 | ATP synthase subunit beta, mitochondrial |
| GO:0031176 | Endo-1,4-beta-xylanase activity | PDE\_00752 | Endo-1,4-beta-xylanase |
| PDE\_02101 | Probable endo-1,4-beta-xylanase B |
| PDE\_02682 | Endo-1,4-beta-xylanase A |
| PDE\_04478 | Endo-1,4-beta-xylanase 6 |
| PDE\_09478 | Endo-1,4-beta-xylanase A |
| GO:0046556 | Alpha-L-arabinofuranosidase activity | PDE\_00016 | Alpha-L-arabinofuranosidase axhA-2 |
| PDE\_06067 | Arabinoxylan arabinofuranohydrolase |
| PDE\_07897 | Probable alpha-L-arabinofuranosidase axhA |
| PDE\_09988 | Probable alpha-N-arabinofuranosidase B |
| GO:0046961 | Proton-transporting ATPase activity, rotational mechanism | PDE\_01144 | ATP synthase subunit alpha, mitochondrial |
| PDE\_02994 | ATP synthase subunit gamma, mitochondrial |
| PDE\_03014 | ATP synthase subunit delta, mitochondrial |
| PDE\_06476 | ATP synthase subunit alpha, mitochondrial |
| PDE\_07279 | ATP synthase subunit beta, mitochondrial |
| GO:0015932 | Nucleobase-containing compound transmembrane transporter activity | PDE\_02295 | GDP-mannose transporter |
| PDE\_08150 | Solute carrier family 28 member 3 |
| PDE\_08167 | UDP-galactose transporter |
| GO:0008121 | Ubiquinol-cytochrome-c reductase activity | PDE\_00191 | Cytochrome b-c1 complex subunit 8 |
| PDE\_00284 | Mitochondrial-processing peptidase subunit beta |
| PDE\_07286 | Cytochrome b-c1 complex subunit Rieske, mitochondrial |
| PDE\_09131 | Cytochrome b-c1 complex subunit 2, mitochondrial |