**Table S4** Enriched functions in *C. parvum* S-rich proteins.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **metabolic process** | |  |  |  |  |  |  |  |
| ID | Name | Bgd count | Result count | % of bgd | Fold enrichment | Odds ratio | Benjamini | Bonferroni |
| GO:0009311 | oligosaccharide metabolic process | 1 | 1 | 100 | 150.58 | 164.18 | *0.022* | 0.132 |
| GO:0005984 | disaccharide metabolic process | 1 | 1 | 100 | 150.58 | 164.18 | *0.022* | 0.132 |
| GO:0005991 | trehalose metabolic process | 1 | 1 | 100 | 150.58 | 164.18 | *0.022* | 0.132 |
| GO:0046351 | disaccharide biosynthetic process | 1 | 1 | 100 | 150.58 | 164.18 | *0.022* | 0.132 |
| GO:0005992 | trehalose biosynthetic process | 1 | 1 | 100 | 150.58 | 164.18 | *0.022* | 0.132 |
| GO:0009312 | oligosaccharide biosynthetic process | 1 | 1 | 100 | 150.58 | 164.18 | *0.022* | 0.132 |
| GO:0034637 | cellular carbohydrate biosynthetic process | 2 | 1 | 50 | 75.29 | 82.05 | *0.028* | 0.197 |
| GO:0005975 | carbohydrate metabolic process | 34 | 2 | 5.9 | 8.86 | 10.43 | *0.028* | 0.222 |
| GO:0044262 | cellular carbohydrate metabolic process | 3 | 1 | 33.3 | 50.19 | 54.67 | *0.029* | 0.261 |
| GO:0016051 | carbohydrate biosynthetic process | 4 | 1 | 25 | 37.65 | 40.98 | *0.033* | 0.326 |
|  |  |  |  |  |  |  |  |  |
| **molecular function** | |  |  |  |  |  |  |  |
| ID | Name | Bgd count | Result count | Pct of bgd | Fold enrichment | Odds ratio | Benjamini | Bonferroni |
| GO:0042578 | phosphoric ester hydrolase activity | 21 | 2 | 9.5 | 14.34 | 17.01 | *0.037* | 0.065 |
| GO:0003964 | RNA-directed DNA polymerase activity | 1 | 1 | 100 | 150.58 | 164.18 | *0.037* | 0.092 |
| GO:0004112 | cyclic-nucleotide phosphodiesterase activity | 3 | 1 | 33.3 | 50.19 | 54.67 | *0.037* | 0.183 |
| GO:0004114 | 3',5'-cyclic-nucleotide phosphodiesterase act. | 3 | 1 | 33.3 | 50.19 | 54.67 | *0.037* | 0.183 |
| GO:0016810 | hydrolase activity, acting on C-N bonds | 3 | 1 | 33.3 | 50.19 | 54.67 | *0.037* | 0.183 |
| GO:0008270 | zinc ion binding | 114 | 3 | 2.6 | 3.96 | 4.95 | *0.043* | 0.261 |
| GO:0046914 | transition metal ion binding | 122 | 3 | 2.5 | 3.7 | 4.6 | *0.044* | 0.309 |

\* Significant values are italicized