**Table S1**

**Gene and accession numbers of the redox enzymes and control proteins from the UniProt™ Protein Database**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parasite** | **Enzyme** | **Gene number**  | **Accession number**  | **Redox drug** |
| *G. duodenalis*  | PFOR | Q24982  | AAA74894.1 | Metronidazole |
| *E. histolytica* | PFOR | N9TJX2 | ENY63830.1 | Metronidazole |
| *C. parvum* | PFOR | A1DRF1 | ABK91849.1 | Nitazoxanide |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Parasite | Control protein1 | Gene/Accession number | Control protein 2 | Gene/Accession number | Control protein 3 | Gene/Accession number |
| *G. duodenalis*  | GAPDH  | **P53429** AAB18421.1 |  TUB | A8BPC0EDO78046.1 | **RPB1** | **Q8MUU2** AAM77743.1 |
| *E. histolytica* | GAPDH  | C4LVR9BAN37492.1 |  TUB  | P31017AAA57315.1 | **RPB1** | Q6IUR3 AAT40981.1 |
| *C. parvum* | GAPDH | Q7YYQ9BAJ77164.1 |  TUB | Q9UAC3AAD20239.1  | **RPB1** | **A0A7G2HJ78 CAD98371.1** |

Table S2

List of protozoa showing how their lifecycle supports the horizontal acquisition of PFOR from bacteria based on the proximity hypothesis.



Straminopiles Alveolates Rhizaria

 Excavates Amoebozoa Metamonads