**Additional file 4: Table S2:** Orthologs of potential invasion-related mucin-type glycoproteins, thrombospondin-related adhesive proteins (TRAPs), insulinase-like proteases, secreted MEDLE family proteins, and rhomboid-like proteases of *Cryptosporidium* spp.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Family** | **Protein** | ***C. parvum*** | ***C. hominis*** | ***C. ubiquitum*** | ***C. andersoni*** |
| **Adhesin (mucin-type glycoprotein)** | gp900 | cgd7\_4020 | Chro.70447 | cubi03073 | cand012040 |
| gp60/40/15 | cgd6\_1080 | Chro.60138 | cubi02234 | absent |
| P23 | cgd4\_3620 | Chro.40414 | cubi01522 | absent |
| CP2 | cgd6\_5410 | Chro.60623 | cubi02667 | absent |
| Clec | cgd3\_440 | Chro.30061 | cubi00854 | cand034120 |
| Muc1 | cgd2\_390 | Chro.20046 | cubi00389 | absent |
| Muc2 | cgd2\_400 | Chro.20047 | cubi00388 | absent |
| Muc3 | cgd2\_410 | Chro.20048 | cubi00387 | absent |
| Muc4 | cgd2\_420 | Chro.20049 | cubi00386 | absent |
| Muc5 | cgd2\_430 | Chro.20050 | cubi00385 | absent |
| Muc6 | cgd2\_440 | Chro.20051 | absent | absent |
| Muc7 | cgd2\_450 | Chro.20052 | cubi00384 | absent |
| Muc8 | cgd1\_470 | Chro.10057 | cubi00043 | absent |
| Muc9 | cgd1\_3550 | Chro.10397 | cubi00351 | cand017610 |
| Muc10 | cgd2\_3290 | Chro.20345 | cubi00739 | cand002970 |
| Muc11 | cgd3\_720 | Chro.30096 | cubi00884 | cand033810 |
| Muc12 | cgd4\_1300 | Chro.40149 | cubi01576 | absent |
| Muc13 | cgd5\_340 | Chro.50359 | cubi01726 | cand013850 |
| Muc14 | cgd5\_1210 | Chro.50263 | cubi01812 | absent |
| Muc15 | cgd5\_2060 | Chro.50173 | cubi01892 | cand035520 |
| Muc16 | cgd6\_710 | Chro.60092 | cubi02197 | cand024260 |
| Muc17 | cgd6\_5400 | Chro.60622 | cubi02666 | absent |
| Muc18 | cgd7\_4660 | Chro.70514 | cubi03137 | cand012700 |
| Muc19 | cgd8\_410 | Chro.80053 | cubi03264 | cand021110 |
| Muc20 | cgd8\_700 | Chro.80087 | cubi03294 | absent |
| Muc21 | cgd8\_1160 | Chro.80136 | cubi03340 | absent |
| Muc22 | cgd8\_2800 | Chro.80327 | cubi03505 | cand023600 |
| Muc23 | cgd8\_3520 | Chro.80404 | cubi03581 | cand004650 |
| Muc24 | cgd8\_4830 | Chro.80555 | cubi03710 | cand009540 |
| **TRAP** | TRAP-C1(TSP1) | cgd1\_3500 | Chro.10390 | cubi00344 | cand017670 |
| TRAP-C2(TSP2) | cgd5\_3420 | Chro.50029 | cubi02109 | cand013510 |
| TSP3 | cgd1\_3510 | Chro.10391 | cubi00345 | cand017660 |
| TSP4 | cgd8\_150 | Chro.80025 | cubi03237 | cand020810 |
| TSP5 | cgd6\_1300 | Chro.60164 | cubi02255 | cand007140 |
| TSP6 | cgd6\_2310 | Chro.60270 | cubi02355 | cand006020 |
| TSP7 | cgd5\_4470 | Chro.60103 | cubi01995 | cand034510 |
| MIC1(TSP8) | cgd6\_780 | Chro.60102 | cubi02205 | cand024180 |
| TSP9 | cgd6\_800 | Chro.60104 | cubi02206 | cand024170 |
| TSP10 | cgd2\_3080 | Chro.20323 | cubi00687 | cand026770 |
| TSP11 | cgd6\_1660 | Chro.60203 | absent | cand006680 |
| TSP12 | cgd8\_540 | Chro.80069 | cubi03279 | cand021260 |
| **Insulinase-like protease** | INS1 | cgd1\_1680 | Chro.10193 | cubi00162 | cand032340 |
| INS2 | cgd1\_3840 | Chro.10431 | cubi00379 | absent |
| INS3 | cgd2\_920 | Chro.20103 | cubi00472 | absent |
| INS4 | cgd2\_930 | Chro.20104 | cubi00473 | cand007890 |
| INS5 | cgd2\_2760 | Chro.20292 | cubi00656 | cand003730 |
| INS6 | cgd2\_4270 | Chro.20459 | cubi00802 | cand002300 |
| INS7 | cgd3\_4170 | Chro.30468 | cubi01223 | absent |
| INS8 | cgd3\_4180 | Chro.30469 | cubi01224 | absent |
| INS9 | cgd3\_4190 | Chro.30470 | cubi01225 | absent |
| INS10 | cgd3\_4200 | absent\* | cubi01227 | absent |
| INS11 | cgd3\_4210 | Chro.30474 | cubi01228 | cand003500 |
| INS12 | cgd3\_4220 | Chro.30475 | cubi01229 | cand003510\*\* |
| INS13 | cgd3\_4240 | absent\* | cubi01231 | cand027870\*\* |
| INS14 | cgd3\_4250 | Chro.30478 | cubi01232 | cand027880\*\* |
| INS15 | cgd3\_4260 | Chro.30479 | cubi01233 | cand026930 |
| INS16 | cgd3\_4270 | Chro.30480 | absent | cand003460 |
| INS17 | cgd3\_4280 | Chro.30482 | cubi01234 | absent |
| INS18 | cgd4\_4240 | Chro.40483 | cubi01672 | absent |
| INS19 | cgd6\_5510 | absent | absent | absent |
| INS20 | cgd6\_5520 | absent | absent | absent |
| INS21 | cgd7\_2080 | Chro.70239 | cubi02884 | cand030190 |
| INS22 | cgd8\_2720 | Chro.80317 | cubi03496 | cand023510 |
| **Secreted MEDLE family protein** | MEDLE1 | cgd5\_4580 | absent | absent | absent |
| MEDLE2 | cgd5\_4590 | absent | absent | absent |
| MEDLE3 | cgd5\_4600 | Chro.50507 | absent | absent |
| MEDLE4 | cgd5\_4610 | absent | absent | absent |
| MEDLE5 | cgd6\_5480 | absent | absent | absent |
| MEDLE6 | cgd6\_5490 | absent | absent | absent |
| **Rhomboid-like protease** | ROM1 | cgd3\_980 | Chro.30129 | cubi00912 | cand038380 |
| ROM2 | cgd6\_760 | Chro.60098 | cubi02202 | cand024210 |
| ROM3 | absent | absent | absent | cand007640 |
| ROM4 | cgd7\_3020 | Chro.70339 | cubi02974 | cand019770 |

\* The absence of some genes from *C. hominis* genome may be caused by segmented small contigs;

\*\* These coding genes are not orthologous with those from other *Cryptosporidium* spp.