

Supplementary Material

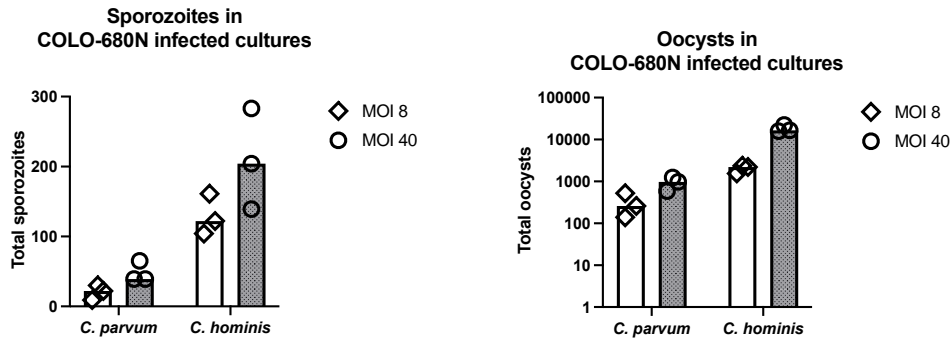
A novel, stain-free, natural auto-fluorescent signal, Sig M, identified from cytometric and transcriptomic analysis of infectivity of *Cryptosporidium hominis* and *Cryptosporidium parvum*

Paul Ogbuigwe[†], Joanna M Roberts^{2†}, Matthew A Knox¹, Axel Heiser³, Anthony Pita¹, Neville A Haack³, Juan Carlos Garcia-Ramirez¹, Niluka Velathanthiri¹, Patrick J Biggs¹, Nigel P French¹, David T S Hayman^{1*}

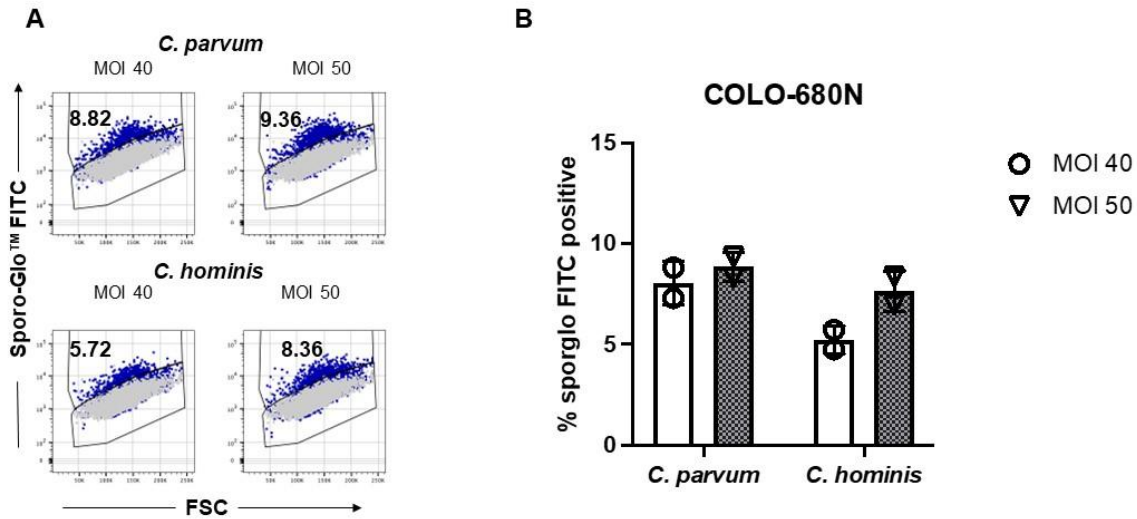
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† Equal contribution and first authorship

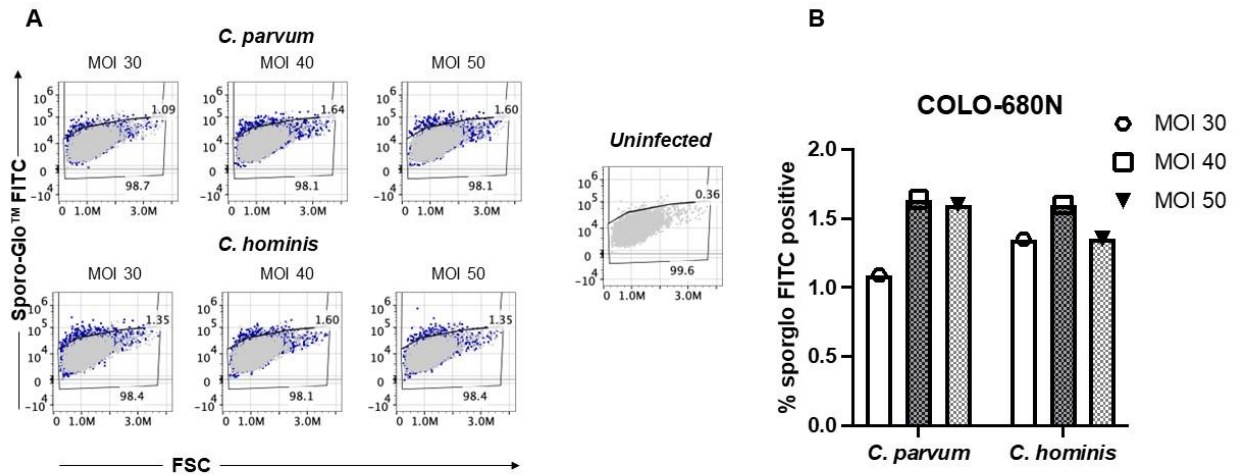
Supplementary Figure 1. Detection of counts/well of oocysts and sporozoites from cultures containing infected and uninfected COLO-680N cells following 48hr incubation with *Cryptosporidium*. Sporozoites and oocysts were identified (Fig 1) and counted using the volume measured during acquisition on the FACSVerse (equipped with thermic volume measurement).



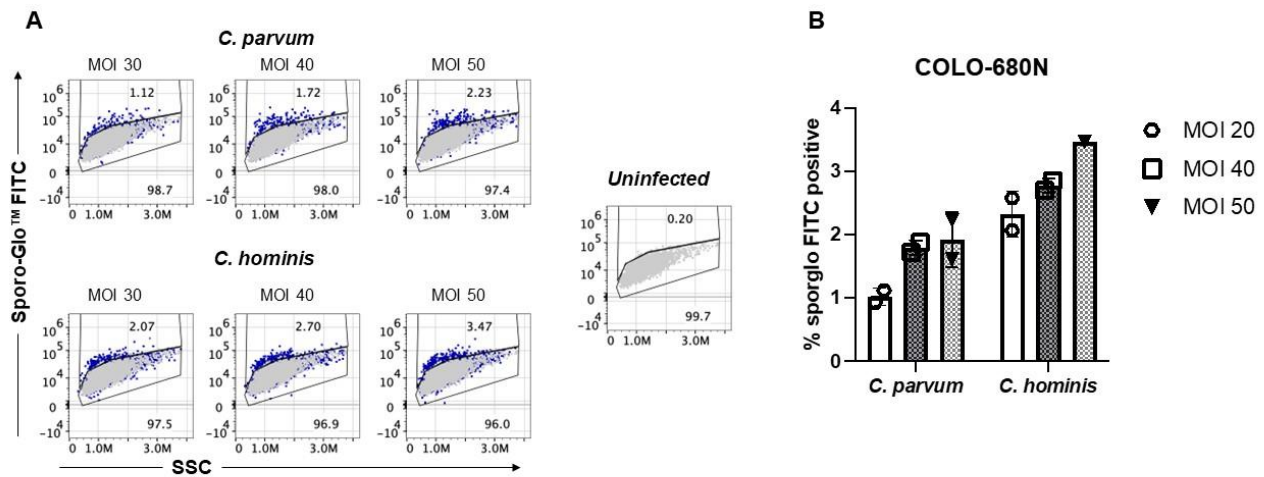
Supplementary Figure 2. Sporo-Glo™ positive COLO-680N cells are detectable in *C. parvum* infection and in increasing amounts with increasing MOI with *C. hominis*. (A) COLO-680N cells were infected at indicated MOI (dark blue dots) with either *C. parvum* (top two panels) or *C. hominis* (bottom two panels) and then fixed, permeabilized and stained with Sporo-Glo™. Uninfected cells stained with Sporo-Glo™ (light grey dots) are overlaid on each panel. Region defining Sporo-Glo™ positive cells is shown and percentage of cells in this region displayed. (B) Duplicates from (A) plotted as percent Sporo-Glo™ positive cells.



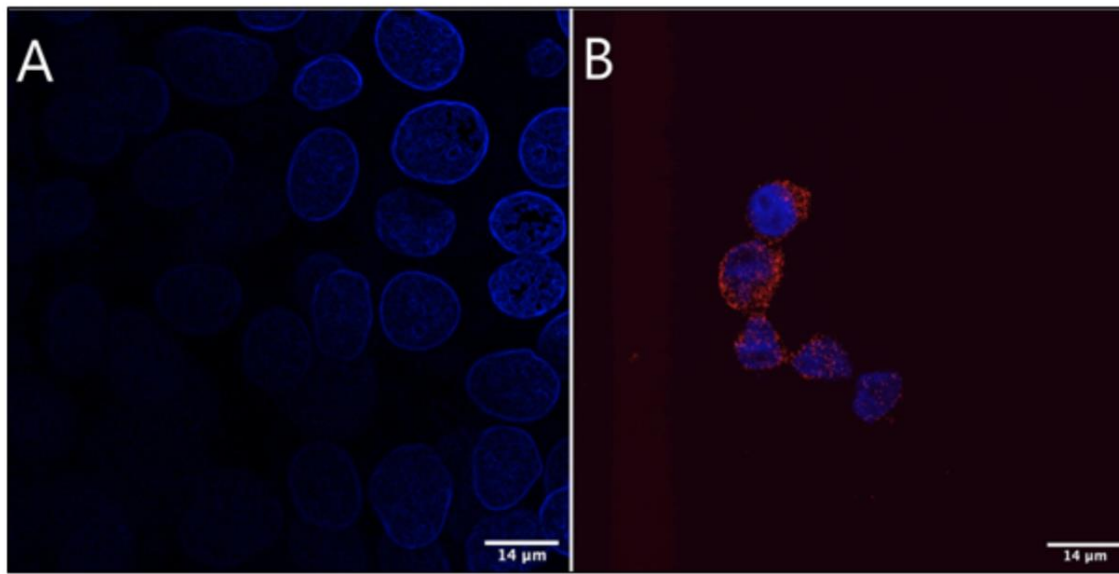
Supplementary Figure 3. Sporo-Glo™ positive COLO-680N cells are detectable at low levels regardless of MOI in *C. parvum* and *C. hominis* infection. (A) COLO-680N cells were infected at indicated MOI (dark blue dots) with either *C. parvum* (top three panels) or *C. hominis* (bottom three panels) and then fixed, permeabilized and stained with Sporo-Glo™. Uninfected cells stained with Sporo-Glo™ (light grey dots) are overlaid on each panel, and shown separately to the right. Regions defining Sporo-Glo™ positive and negatives cells are shown and percentage of cells in each region displayed. (B) Single data points from (A) plotted as percent Sporo-Glo™ FITC positive cells.



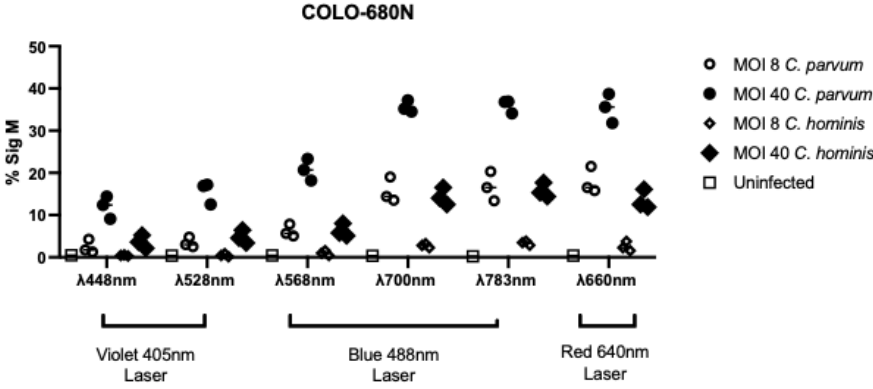
Supplementary Figure 4. Sporo-Glo™ positive COLO-680N cells are detectable at low levels with a trend to increasing proportions of positive cells with increasing MOI for *C. parvum* and *C. hominis*. (A) COLO-680N cells were infected at indicated MOI (dark blue dots) with either *C. parvum* (top three panels) or *C. hominis* (bottom three panels) and then fixed, permeabilized and stained with Sporo-Glo™. Uninfected cells stained with Sporo-Glo™ (light grey dots) are overlaid on each panel and shown separately to the right. Regions defining Sporo-Glo™ positive and negatives cells are shown and percentage of cells in each region displayed. (B) Duplicates from (A) plotted as percent Sporo-Glo™ positive cells.



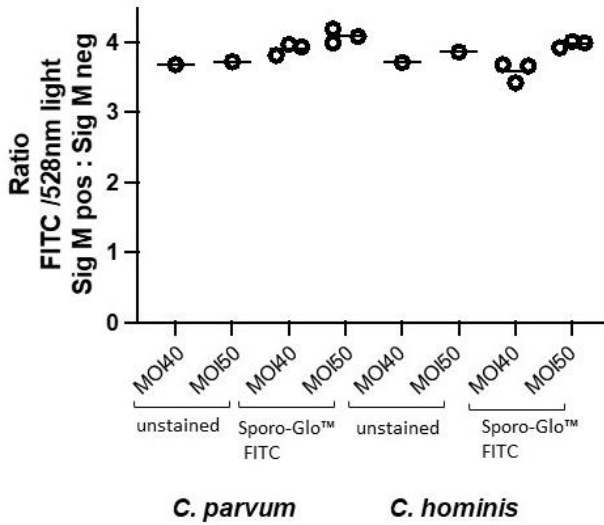
Supplementary Figure 5. Confocal microscopy image of *C. parvum*-infected COLO-680N cells expressing IL-8. Uninfected cells are displayed in A, infected cells are displayed in B. The nucleus is stained blue with DAPI, and the red/orange dots represent IL-8 molecules tagged with a fluorescent antibody. 72 days old *C. parvum* IIAA18G2R1 excysted oocysts were used for infection in this experiment. Addition of Brefeldin A 12 hrs before fixing resulted in some cell death and shape distortion in some cells. Scale bar represents 14 μ m.



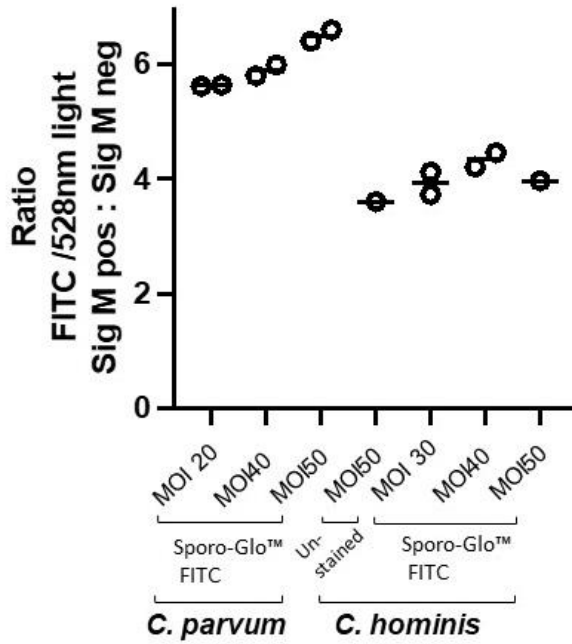
Supplementary Figure 6. Sig M-style fluorescence detected in an early experiment where all infected cultures were fixed, permeabilized and fully stained (no infected unstained cells to allow discreet measurement of Sig M). Infected, stained COLO-680N cultures (Sporo-Glo™, FVDefluor780) contain a population of SigM positive cells identifiable with a range of emission and excitation optics. Note, presence of Sporo-Glo™ will likely influence signal detected in some spectrally proximal detectors (e.g., lambda568nm).



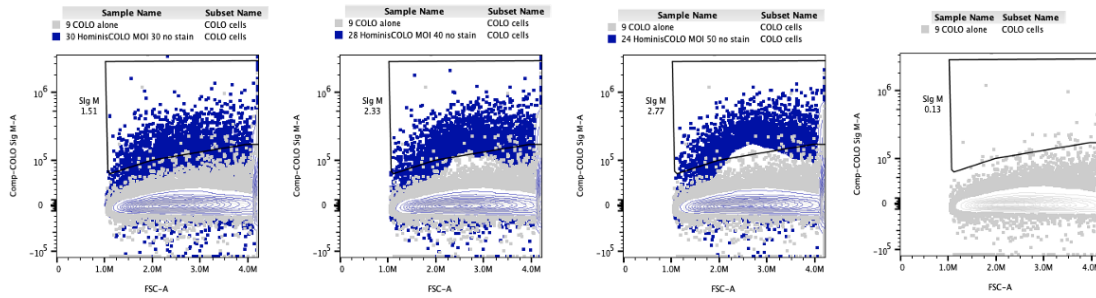
Supplementary Figure 7. Ratio of FITC/lambda 528nm light for Sig M high cells vs Sig M low cells may demonstrate a small increase in favour of a specific Sporo-Glo™ signal for parvum infected cultures while *C. hominis* infected cultures may show a similar ratio regardless of Sporo-Glo™ staining. Each circle represents a ratio calculated from an individual infected COLO-680N culture.



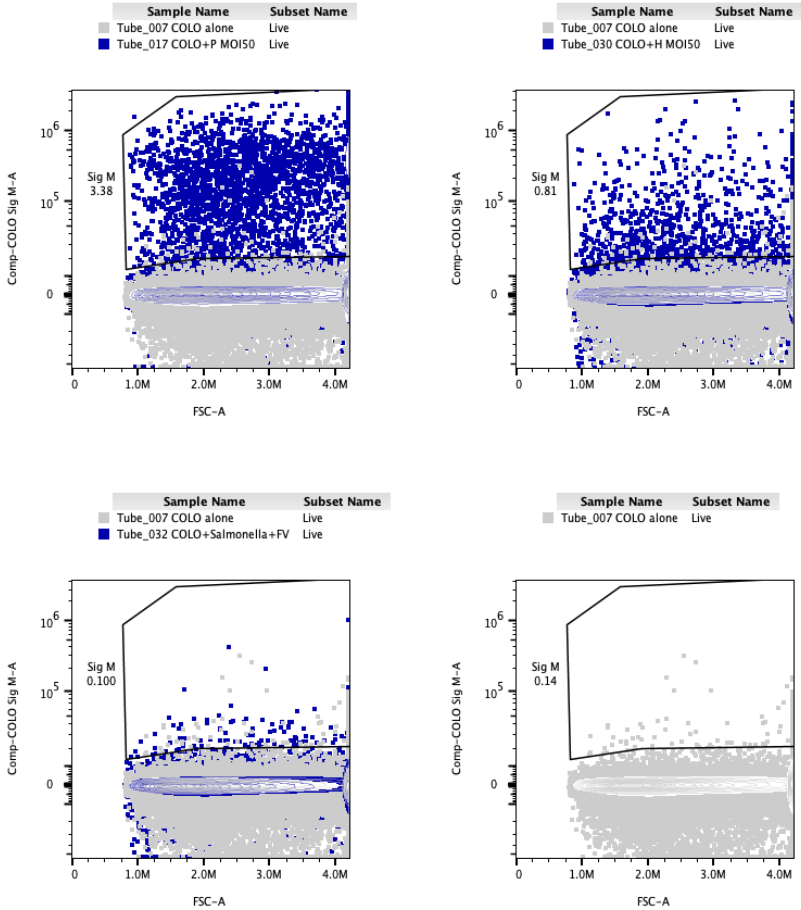
Supplementary Figure 8. Ratio of FITC/lambda 528nm light for Sig M high cells vs Sig M low cells demonstrates a small increase in favour of a specific Sporo-Glo™ signal for *C. parvum* infected cultures while *C. hominis* infected cultures may show a similar ratio regardless of Sporo-Glo™ staining. Each circle represents a ratio calculated from an individual infected COLO-680N culture.



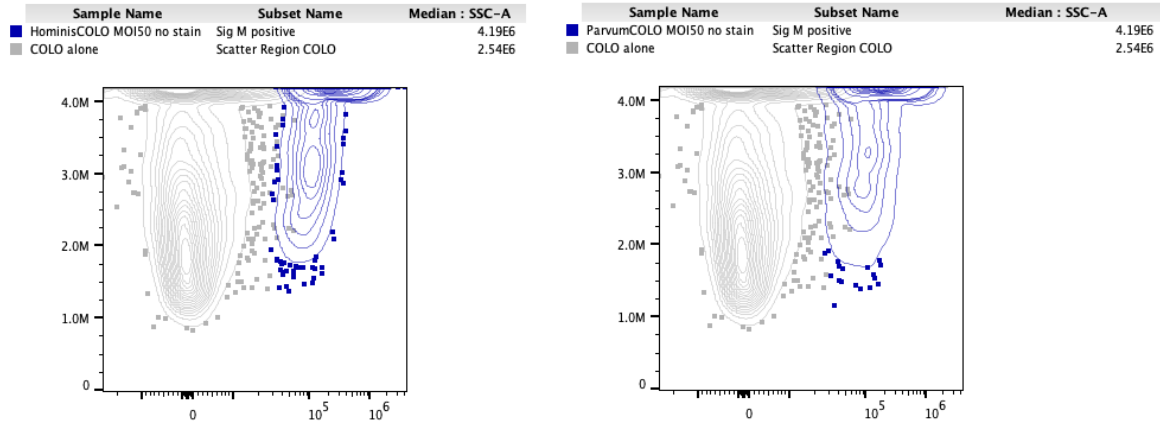
Supplementary Figure 9. Sig M is detectable in *C. hominis* infected cultures, showing a trend of increasing frequency of Sig M positive cells with increasing MOI.



Supplementary Figure 10. Sig M is detectable in *C. hominis* and *C. parvum* infected cultures, but not in *Salmonella* infected cultures (one representative of duplicate *Salmonella* infection shown)



Supplementary Figure 11. Side scatter of Sig M positive cells is too bright to be clearly resolved using these instrument settings (CAS), showing that Sig M positive COLO-680N cells are likely more granular than the uninfected COLO-680N cells shown for comparison (from uninfected cultures) (representative of two separate experiments and both species of *Cryptosporidium*)



Supplementary Table 1. List of target genes used in this study.

| Gene ID | Accession | Flags | Species |
|------------------|------------------|-------------------|-------------------------------|
| cgd2_3270 | XM_626517.1 | Housekeeping Gene | <i>Cryptosporidium parvum</i> |
| cgd5_3160 | XM_001388245.1 | Housekeeping Gene | <i>Cryptosporidium parvum</i> |
| cgd6_2090 | XM_627569.1 | Housekeeping Gene | <i>Cryptosporidium parvum</i> |
| cgd6_4270 | XM_627759.1 | Housekeeping Gene | <i>Cryptosporidium parvum</i> |
| cgd_2_140 | XM_625383.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_1660 | XM_628006.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_2270 | XM_628059.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_2400 | XM_628069.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_2880 | XM_628107.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_300 | XM_627890.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_3810 | XM_628192.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_640 | XM_627916.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_880 | XM_001388111.1 | | <i>Cryptosporidium parvum</i> |
| cgd1_910 | XM_627937.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_1070 | XM_626335.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_20 | XM_625373.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_200 | XM_625389.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_2200 | XM_626425.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_2540 | XM_626456.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_3000 | XM_626494.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_3070 | XM_626501.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_350 | XM_625403.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_3730 | XM_626558.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_430 | XM_625410.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_4320 | XM_626611.1 | | <i>Cryptosporidium parvum</i> |
| cgd2_820 | XM_626315.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_1300 | XM_626705.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_1400 | XM_626715.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_1570 | XM_001388065.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_1940 | XM_626765.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_2250 | XM_626792.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_2940 | XM_626851.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_330 | XM_001388055.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_3770 | XM_626924.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_3790 | XM_626926.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_3930 | XM_626938.1 | | <i>Cryptosporidium parvum</i> |
| cgd3_4150 | XM_001388094.1 | | <i>Cryptosporidium parvum</i> |

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|------------------|----------------|-------------------------------|
| cgd3_4260 | XM_626969.1 | <i>Cryptosporidium parvum</i> |
| cgd3_510 | XM_626636.1 | <i>Cryptosporidium parvum</i> |
| cgd3_760 | XM_626659.1 | <i>Cryptosporidium parvum</i> |
| cgd4_1940 | XM_625788.1 | <i>Cryptosporidium parvum</i> |
| cgd4_2260 | XM_625816.1 | <i>Cryptosporidium parvum</i> |
| cgd4_3080 | XM_625892.1 | <i>Cryptosporidium parvum</i> |
| cgd4_3160 | XM_625900.1 | <i>Cryptosporidium parvum</i> |
| cgd4_3550 | XM_625931.1 | <i>Cryptosporidium parvum</i> |
| cgd4_3620 | XM_625938.1 | <i>Cryptosporidium parvum</i> |
| cgd4_4310 | XM_625446.1 | <i>Cryptosporidium parvum</i> |
| cgd4_4460 | XM_625460.1 | <i>Cryptosporidium parvum</i> |
| cgd5_10 | XM_625966.1 | <i>Cryptosporidium parvum</i> |
| cgd5_1470 | XM_626094.1 | <i>Cryptosporidium parvum</i> |
| cgd5_2370 | XM_626174.1 | <i>Cryptosporidium parvum</i> |
| cgd5_2800 | XM_626216.1 | <i>Cryptosporidium parvum</i> |
| cgd5_3040 | XM_626236.1 | <i>Cryptosporidium parvum</i> |
| cgd5_4590 | XM_625307.1 | <i>Cryptosporidium parvum</i> |
| cgd6_10 | XM_625341.1 | <i>Cryptosporidium parvum</i> |
| cgd6_1070 | XM_627479.1 | <i>Cryptosporidium parvum</i> |
| cgd6_1080 | XM_627480.1 | <i>Cryptosporidium parvum</i> |
| cgd6_2170 | XM_627575.1 | <i>Cryptosporidium parvum</i> |
| cgd6_2330 | XM_627590.1 | <i>Cryptosporidium parvum</i> |
| cgd6_2600 | XM_627613.1 | <i>Cryptosporidium parvum</i> |
| cgd6_3010 | XM_001388297.1 | <i>Cryptosporidium parvum</i> |
| cgd6_3800 | XM_627719.1 | <i>Cryptosporidium parvum</i> |
| cgd6_3850 | XM_627723.1 | <i>Cryptosporidium parvum</i> |
| cgd6_3920 | XM_627729.1 | <i>Cryptosporidium parvum</i> |
| cgd6_3990 | XM_001388307.1 | <i>Cryptosporidium parvum</i> |
| cgd6_40 | XM_625344.1 | <i>Cryptosporidium parvum</i> |
| cgd6_4190 | XM_627752.1 | <i>Cryptosporidium parvum</i> |
| cgd6_4620 | XM_627791.1 | <i>Cryptosporidium parvum</i> |
| cgd6_4630 | XM_627792.1 | <i>Cryptosporidium parvum</i> |
| cgd6_4860 | XM_627813.1 | <i>Cryptosporidium parvum</i> |
| cgd6_4910 | XM_627816.1 | <i>Cryptosporidium parvum</i> |
| cgd6_5400 | XM_627858.1 | <i>Cryptosporidium parvum</i> |
| cgd6_5410 | XM_627859.1 | <i>Cryptosporidium parvum</i> |
| cgd7_120 | XM_001388325.1 | <i>Cryptosporidium parvum</i> |
| cgd7_130 | XM_628206.1 | <i>Cryptosporidium parvum</i> |
| cgd7_1460 | XM_628328.1 | <i>Cryptosporidium parvum</i> |
| cgd7_1830 | XM_628358.1 | <i>Cryptosporidium parvum</i> |
| cgd7_2110 | XM_628385.1 | <i>Cryptosporidium parvum</i> |
| cgd7_2250 | XM_628397.1 | <i>Cryptosporidium parvum</i> |

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|------------------|----------------|-------------------------------|
| cgd7_2280 | XM_628400.1 | <i>Cryptosporidium parvum</i> |
| cgd7_2300 | XM_628401.1 | <i>Cryptosporidium parvum</i> |
| cgd7_2430 | XM_628414.1 | <i>Cryptosporidium parvum</i> |
| cgd7_2540 | XM_628424.1 | <i>Cryptosporidium parvum</i> |
| cgd7_3010 | XM_628466.1 | <i>Cryptosporidium parvum</i> |
| cgd7_3020 | XM_628467.1 | <i>Cryptosporidium parvum</i> |
| cgd7_3240 | XM_001388357.1 | <i>Cryptosporidium parvum</i> |
| cgd7_3250 | XM_628487.1 | <i>Cryptosporidium parvum</i> |
| cgd7_4050 | XM_628560.1 | <i>Cryptosporidium parvum</i> |
| cgd7_480 | XM_628236.1 | <i>Cryptosporidium parvum</i> |
| cgd7_700 | XM_001388332.1 | <i>Cryptosporidium parvum</i> |
| cgd7_790 | XM_628266.1 | <i>Cryptosporidium parvum</i> |
| cgd8_1840 | XM_001388389.1 | <i>Cryptosporidium parvum</i> |
| cgd8_2340 | XM_627137.1 | <i>Cryptosporidium parvum</i> |
| cgd8_3230 | XM_627219.1 | <i>Cryptosporidium parvum</i> |
| cgd8_3390 | XM_627234.1 | <i>Cryptosporidium parvum</i> |
| cgd8_3460 | XM_627239.1 | <i>Cryptosporidium parvum</i> |
| cgd8_3480 | XM_627241.1 | <i>Cryptosporidium parvum</i> |
| cgd8_3520 | XM_627245.1 | <i>Cryptosporidium parvum</i> |
| cgd8_3770 | XM_627269.1 | <i>Cryptosporidium parvum</i> |
| cgd8_4050 | XM_627296.1 | <i>Cryptosporidium parvum</i> |
| cgd8_4220 | XM_627312.1 | <i>Cryptosporidium parvum</i> |
| cgd8_4320 | XM_627320.1 | <i>Cryptosporidium parvum</i> |
| cgd8_4500 | XM_627336.1 | <i>Cryptosporidium parvum</i> |
| cgd8_60 | XM_625470.1 | <i>Cryptosporidium parvum</i> |
| ARG1 | NM_000045.3 | <i>Homo sapiens</i> |
| ARG2 | NM_001172.3 | <i>Homo sapiens</i> |
| BCL2 | NM_000657.2 | <i>Homo sapiens</i> |
| CAMP | NM_004345.3 | <i>Homo sapiens</i> |
| CASP1 | NM_001223.3 | <i>Homo sapiens</i> |
| CASP3 | NM_004346.3 | <i>Homo sapiens</i> |
| CASP4 | NM_001225.3 | <i>Homo sapiens</i> |
| CASP5 | NM_004347.1 | <i>Homo sapiens</i> |
| CCL5 | NM_002985.2 | <i>Homo sapiens</i> |
| CD36 | NM_000072.3 | <i>Homo sapiens</i> |
| CISH | NM_145071.2 | <i>Homo sapiens</i> |
| CX3CL1 | NM_002996.3 | <i>Homo sapiens</i> |
| CXCL8 | NM_000584.2 | <i>Homo sapiens</i> |
| DEFA1 | NM_004084.2 | <i>Homo sapiens</i> |
| DEFB1 | NM_005218.3 | <i>Homo sapiens</i> |
| DEFB4B | NM_001205266.1 | <i>Homo sapiens</i> |
| FAS | NM_000043.4 | <i>Homo sapiens</i> |
| FASLG | NM_000639.1 | <i>Homo sapiens</i> |

| | | | |
|---------------|----------------|--|---------------------|
| GUSB | NM_000181.3 | | <i>Homo sapiens</i> |
| HPRT1 | NM_000194.1 | | <i>Homo sapiens</i> |
| ICAM1 | NM_000201.2 | | <i>Homo sapiens</i> |
| IFNG | NM_000619.2 | | <i>Homo sapiens</i> |
| IL18 | NM_001562.3 | | <i>Homo sapiens</i> |
| IL1B | NM_000576.2 | | <i>Homo sapiens</i> |
| IL1R1 | NM_001320984.1 | | <i>Homo sapiens</i> |
| IL33 | NM_033439.2 | | <i>Homo sapiens</i> |
| IL6 | NM_000600.3 | | <i>Homo sapiens</i> |
| NFKB1 | NM_003998.2 | | <i>Homo sapiens</i> |
| PTGS2 | NM_000963.1 | | <i>Homo sapiens</i> |
| PYCARD | NM_013258.3 | | <i>Homo sapiens</i> |
| RELA | NM_021975.2 | | <i>Homo sapiens</i> |
| RPL19 | NM_000981.3 | | <i>Homo sapiens</i> |
| SDHA | NM_004168.1 | | <i>Homo sapiens</i> |
| SIRT1 | NM_012238.4 | | <i>Homo sapiens</i> |
| SOCS1 | NM_003745.1 | | <i>Homo sapiens</i> |
| SOCS2 | NM_003877.3 | | <i>Homo sapiens</i> |
| SOCS3 | NM_003955.3 | | <i>Homo sapiens</i> |
| SOCS4 | NM_199421.1 | | <i>Homo sapiens</i> |
| STAT6 | NM_003153.3 | | <i>Homo sapiens</i> |
| TRAF2 | NM_021138.3 | | <i>Homo sapiens</i> |

Supplementary Table 2. Fifty genes most highly expressed in oocysts/sporozites from Matos et al (2019). (*) represents the number of orthologues within eupathDB genomes. (**) represents the number of OrthoMCL orthologous sequences.

| Gene ID | Product Description | Ortholog Group | Ortholog count EupathDB* | Ortholog count total** |
|------------------|--|----------------|--------------------------|------------------------|
| cgd2_140 | Stress-associated_endoplasmic_reticulum_protein | OG5_130196 | 5 | 58 |
| cgd1_2400 | Uncharacterized_secreted_protein | OG5_222471 | 8 | 2 |
| cgd1_3810 | Uncharacterized_protein | OG5_194982 | 9 | 3 |
| cgd1_640 | Signal_peptide_region_containing_protein | OG5_194890 | 9 | 3 |
| cgd1_880 | Eukaryotic_initiation_factor_4A | OG5_126984 | 15 | 154 |
| cgd1_910 | AN1-type_and_A20-type_Zinc_finger | OG5_127624 | 13 | 112 |
| cgd2_200 | Uncharacterized_protein | OG5_130876 | 12 | 50 |
| cgd2_2540 | Glutaredoxin | OG5_126864 | 17 | 172 |
| cgd2_3070 | High_mobility_group_box_domain_containing_protein | OG5_126740 | 39 | 202 |
| cgd2_3730 | Glutathione_S-transferase_C-terminal_domain_containing_protein | OG5_180098 | 9 | 4 |
| cgd2_430 | Signal_peptide_containing_protein | OG5_222485 | 6 | 2 |
| cgd2_4320 | Thioredoxin/glutathione_reductase_selenoprotein | OG5_126785 | 23 | 189 |
| cgd2_820 | Translation_initiation_factor_SUI1 | OG5_127384 | 12 | 124 |
| cgd3_1570 | Profilin | OG5_141746 | 11 | 14 |
| cgd3_1940 | Translationally_controlled_tumour_protein_associated_protein | OG5_127617 | 11 | 112 |
| cgd3_330 | unspecified product | OG5_129031 | 11 | 77 |
| cgd3_3770 | _Hsp90 | OG5_126623 | 17 | 314 |
| cgd3_4150 | RNA_recognition_motif_domain_containing_protein | OG5_129225 | 10 | 73 |
| cgd3_510 | GDP-fucose_transporter | OG5_188054 | 8 | 3 |
| cgd3_760 | Ribosomal_protein_L7Ae/L30e/S12e/Gadd45 | OG5_128156 | 12 | 97 |
| cgd4_3550 | Secreted_Kazal_domain-containing_protein | OG5_129460 | 24 | 69 |
| cgd4_3620 | Immunodominant_antigen_23393226 | OG5_222616 | 7 | 2 |
| cgd4_4310 | Ring_finger_domain_containing_protein | OG5_191746 | 7 | 3 |
| cgd5_10 | Uncharacterized_Secreted_Protein | OG5_222658 | 7 | 2 |
| cgd5_1470 | Nucleoside_diphosphate_kinase | OG5_126708 | 22 | 214 |
| cgd5_2800 | Actin_depolymerizing_factor | OG5_127118 | 12 | 143 |
| cgd6_10 | Uncharacterized_protein | OG5_222668 | 7 | 2 |
| cgd6_2600 | Uncharacterized_protein | OG5_195457 | 9 | 3 |
| cgd6_3010 | Polyadenylate-binding_protein | OG5_126795 | 15 | 187 |
| cgd6_3850 | 50S_ribosomal_protein_L30e-like | OG5_127322 | 15 | 127 |
| cgd6_3920 | Uncharacterized_protein_with_Tetratricopeptide-like_helical | OG5_175069 | 9 | 4 |
| cgd6_40 | Uncharacterized_protein | OG5_164335 | 7 | 6 |
| cgd6_4860 | DEAD/DEAH_box_helicase_with_GUCT_domain | OG5_128505 | 15 | 89 |
| cgd6_4910 | Zinc_finger_C3H1-type_domain_containing_protein | OG5_190023 | 11 | 3 |

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|------------------|--|------------|----|-----|
| cgd6_5400 | Uncharacterized_Secreted_Protein | OG5_214933 | 6 | 2 |
| cgd6_5410 | Uncharacterized_Secreted_Protein | OG5_222709 | 7 | 2 |
| cgd7_2300 | Translation_elongation_factor_IF5A | OG5_126922 | 13 | 162 |
| cgd7_2430 | Translation_initiation_factor_eIF-5_Tif5p/ZnR+W2_domain-containing_protein | OG5_127779 | 13 | 106 |
| cgd7_3010 | Uncharacterized_protein | OG5_195622 | 9 | 3 |
| cgd7_3240 | RNA_polymerase_archaeal_subunit_P/eukaryotic_subunit_RPABC4 | OG5_130124 | 7 | 59 |
| cgd7_3250 | Uncharacterized_Protein | OG5_195630 | 9 | 3 |
| cgd7_480 | L-lactate/malate_dehydrogenase | OG5_126911 | 29 | 164 |
| cgd7_790 | Uncharacterized_protein | OG5_169153 | 6 | 5 |
| cgd8_3230 | AP2/ERF_domain_containing_protein | OG5_195785 | 7 | 3 |
| cgd8_3480 | 60S_ribosomal_protein_L34 | OG5_127025 | 12 | 151 |
| cgd8_3520 | Uncharacterized_Secreted_Protein | OG5_135537 | 9 | 23 |
| cgd8_3770 | DNAJ_like_chaperone | OG5_126883 | 17 | 168 |
| cgd8_4220 | High_mobility_group_box_domain_containing_protein | OG5_144330 | 10 | 12 |
| cgd8_4320 | Uncharacterized_Protein | OG5_195816 | 9 | 3 |
| cgd8_60 | Uncharacterized_Protein | OG5_222757 | 7 | 2 |

Supplementary Table 3. Fifty genes most highly expressed in trophozoites/meronts from Matos et al (2019). (*) represents the number of orthologues within eupathDB genomes. (**) represents the number of OrthoMCL orthologous sequences.

| Gene ID | Product Description | Ortholog Group | Ortholog count euk pathogens* | Ortholog count total** |
|------------------|---|--------------------|----------------------------------|---------------------------|
| cgd1_1660 | 60S_ribosomal_protein_L36 | OG5_127134 | 12 | 141 |
| cgd1_2270 | 40S_ribosomal_protein_S26 | OG5_127138 | 12 | 141 |
| cgd1_2880 | Uncharacterized_protein | OG5_cpar cgd1_2880 | 3 | |
| cgd1_300 | 40S_ribosomal_protein_S21 | OG5_127484 | 11 | 118 |
| cgd1_3810 | Uncharacterized_protein | OG5_194982 | 9 | 3 |
| cgd2_1070 | 40S_ribosomal_protein_S25 | OG5_126998 | 12 | 153 |
| cgd2_200 | Uncharacterized_protein | OG5_130876 | 12 | 50 |
| cgd2_2200 | Ribosomal_protein_L37 | OG5_126918 | 12 | 163 |
| cgd2_3000 | 40S_ribosomal_protein_S16 | OG5_126930 | 12 | 161 |
| cgd2_350 | 60S_ribosomal_protein_L39 | OG5_127376 | 6 | 125 |
| cgd2_820 | Translation_initiation_factor_SUI1 | OG5_127384 | 12 | 124 |
| cgd3_1300 | _60S_ribosomal_protein_L12 | OG5_127022 | 12 | 151 |
| cgd3_1570 | Profilin | OG5_141746 | 11 | 14 |
| cgd3_2250 | 60S_ribosomal_protein_L37A | OG5_127166 | 11 | 139 |
| cgd3_3790 | 60S_ribosomal_protein_L19 | OG5_126940 | 11 | 160 |
| cgd3_3930 | 60S_ribosomal_protein_L27A | OG5_127016 | 11 | 152 |
| cgd3_510 | GDP-fucose_transporter | OG5_188054 | 8 | 3 |
| cgd4_2260 | _60S_acidic_ribosomal_protein_P0 | OG5_127051 | 12 | 149 |
| cgd4_3080 | Ribosomal_protein_S27a_with_Zinc-binding_domain/ubiquitin/Zinc-binding_domain | OG5_127221 | 14 | 135 |
| cgd4_3160 | 40S_ribosomal_protein_S3a | OG5_126852 | 12 | 175 |
| cgd4_3620 | Immunodominant_antigen_23393226 | OG5_222616 | 7 | 2 |
| cgd5_1470 | Nucleoside_diphosphate_kinase | OG5_126708 | 22 | 214 |
| cgd5_2370 | 60S_acidic_ribosomal_protein_L12/LP1-like_protein | OG5_126872 | 13 | 170 |
| cgd5_3040 | 40S_ribosomal_protein_S7 | OG5_127368 | 12 | 125 |
| cgd5_3160 | Actin | OG5_126595 | 23 | 421 |
| cgd6_10 | Uncharacterized_protein | OG5_222668 | 7 | 2 |
| cgd6_1070 | Uncharacterized_protein | OG5_128239 | 12 | 95 |
| cgd6_1080 | Glycoprotein_GP40 | OG5_222676 | 7 | 2 |
| cgd6_2170 | 60S_ribosomal_protein_L5 | OG5_126688 | 12 | 222 |
| cgd6_2330 | Uncharacterized_protein | OG5_195453 | 9 | 3 |
| cgd6_3990 | Elongation_factor_1-alpha | OG5_126631 | 17 | 277 |
| cgd6_40 | Uncharacterized_protein | OG5_164335 | 7 | 6 |
| cgd6_4190 | 60S_ribosomal_protein_L10/L16_alpha/beta_hammerhead | OG5_126951 | 12 | 158 |
| cgd6_4620 | 60S_ribosomal_protein_L26 | OG5_126931 | 12 | 161 |

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|------------------|--|------------|----|-----|
| cgd6_4630 | 40S_ribosomal_protein_S8 | OG5_127039 | 12 | 150 |
| cgd6_5410 | Uncharacterized_Secreted_Protein | OG5_222709 | 7 | 2 |
| cgd7_130 | Ribosomal_protein_S11 | OG5_126681 | 12 | 225 |
| cgd7_1460 | 40S_ribosomal_protein_S27 | OG5_127008 | 11 | 153 |
| cgd7_1873 | Zinc-binding_ribosomal_protein_L44 | OG5_126988 | 12 | 154 |
| cgd7_2110 | 60S_ribosomal_proteins_L8/L2 | OG5_126641 | 14 | 264 |
| cgd7_2250 | 40S_ribosomal_protein_S3_KH2 | OG5_126820 | 13 | 181 |
| cgd7_2280 | Ribosomal_protein_L40e | OG5_128257 | 27 | 95 |
| cgd7_2300 | Translation_elongation_factor_IF5A | OG5_126922 | 13 | 162 |
| cgd7_2540 | 60S_ribosomal_protein_L35A | OG5_127072 | 12 | 147 |
| cgd7_4050 | Ribosomal_protein_L38 | OG5_127448 | 11 | 120 |
| cgd7_480 | L-lactate/malate_dehydrogenase | OG5_126911 | 29 | 164 |
| cgd8_2340 | Cold-shock_DNA-binding_domain-containing_protein | OG5_126866 | 16 | 171 |
| cgd8_3480 | 60S_ribosomal_protein_L34 | OG5_127025 | 12 | 151 |
| cgd8_4050 | Ribosomal_protein_S29 | OG5_127205 | 7 | 136 |
| cdg8_1840 | Ribosomal_protein_S4/S9 | OG5_126983 | 13 | 154 |

Supplementary Table 4. Expression values of top 50 genes expressed in all *Cryptosporidium parvum* samples (including sporozoite data). The log₂ values of the normalised read counts and the normalised read counts per kb (divided by transcript length) are listed for all libraries. Taken from Lippuner et al (2018).

| CryptoDB ID | Reads sporozoites (log ₂ (x+1)) | CryptoDB ID | Reads in vivo 2 days p.i. (log ₂ (x+1)) | CryptoDB ID | Reads in vivo 4 days p.i. (log ₂ (x+1)) | CryptoDB ID | Reads in vitro 2 days p.i. average (log ₂ (x+1)) | CryptoDB ID | Reads in vitro 4 days p.i. average (log ₂ (x+1)) |
|-------------|--|-------------|--|-------------|--|-------------|---|-------------|---|
| cgd8_3520 | 15.96 | cgd6_1080 | 14.15 | cgd7_4020 | 14.16 | cgd6_1080 | 14.39 | cgd8_3520 | 13.92 |
| cgd7_480 | 15.80 | cgd6_2090 | 13.01 | cgd6_1080 | 13.81 | cgd8_3520 | 13.51 | cgd7_480 | 13.90 |
| cgd1_640 | 15.76 | cgd7_4020 | 12.85 | cgd8_3520 | 13.71 | cgd7_480 | 13.40 | cgd1_640 | 13.59 |
| cgd6_5410 | 14.66 | cgd8_3520 | 12.84 | cgd6_2090 | 13.63 | cgd1_640 | 13.17 | cgd6_1080 | 13.42 |
| cgd3_3770 | 14.34 | cgd6_200 | 12.57 | cgd6_200 | 13.59 | cgd6_5410 | 12.60 | cgd6_5410 | 12.88 |
| cgd4_3550 | 14.20 | cgd6_3990 | 12.23 | cgd1_640 | 13.14 | cgd3_510 | 12.20 | cgd3_510 | 12.36 |
| cgd8_3230 | 14.04 | cgd3_3370 | 12.15 | cgd3_3370 | 13.10 | cgd4_3550 | 12.06 | cgd4_3550 | 12.34 |
| cgd1_3810 | 13.83 | cgd6_5410 | 12.00 | cgd6_5410 | 12.77 | cgd3_3770 | 11.99 | cgd3_3770 | 12.25 |
| cgd3_510 | 13.80 | cgd5_3160 | 11.94 | cgd7_480 | 12.68 | cgd6_200 | 11.98 | cgd1_3810 | 12.07 |
| cgd6_2600 | 13.69 | cgd6_10 | 11.89 | cgd5_3160 | 12.57 | cgd1_3810 | 11.91 | cgd8_3230 | 12.02 |
| cgd2_200 | 13.67 | cgd1_3810 | 11.79 | cgd6_3990 | 12.28 | cgd8_3230 | 11.68 | cgd6_5400 | 11.91 |
| cgd6_3920 | 13.65 | cgd7_4810 | 11.75 | cgd3_510 | 12.11 | cgd6_5400 | 11.59 | cgd6_10 | 11.64 |
| cgd6_5400 | 13.65 | cgd7_480 | 11.71 | cgd5_1470 | 12.06 | cgd6_2450 | 11.53 | cgd2_3110 | 11.59 |
| cgd6_3010 | 13.63 | cgd4_3090 | 11.69 | cgd4_3550 | 11.93 | cgd2_3110 | 11.39 | cgd6_3010 | 11.57 |
| cgd7_2430 | 13.42 | cgd8_4830 | 11.68 | cgd1_3810 | 11.93 | cgd6_3010 | 11.38 | cgd6_3920 | 11.55 |

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|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
| cgd2_20 | 13.38 | cgd6_710 | 11.66 | cgd2_3110 | 11.75 | cgd6_3460 | 11.36 | cgd6_2600 | 11.49 |
| cgd2_3110 | 13.33 | cgd5_1470 | 11.65 | cgd6_4460 | 11.73 | cgd6_3990 | 11.32 | cgd8_1770 | 11.41 |
| cgd6_10 | 13.31 | cgd2_790 | 11.60 | cgd3_1570 | 11.72 | cgd6_10 | 11.25 | cgd6_2090 | 11.38 |
| cgd8_1770 | 13.20 | cgd7_4880 | 11.49 | cgd6_3920 | 11.63 | cgd6_3920 | 11.22 | cgd2_20 | 11.36 |
| cgd5_10 | 13.07 | cgd6_3460 | 11.40 | cgd3_3770 | 11.58 | cgd2_20 | 11.21 | cgd7_2430 | 11.20 |
| cgd3_1570 | 13.00 | cgd3_3770 | 11.36 | cgd6_2330 | 11.52 | cgd6_2090 | 11.20 | cgd2_200 | 11.09 |
| cgd4_3630 | 12.88 | cgd3_510 | 11.34 | cgd6_10 | 11.49 | cgd7_3120 | 11.19 | cgd4_3620 | 10.98 |
| cgd2_940 | 12.83 | cgd7_300 | 11.34 | cgd6_3460 | 11.35 | cgd6_2600 | 11.16 | cgd2_940 | 10.97 |
| cgd4_3620 | 12.76 | cgd6_120 | 11.29 | cgd7_4810 | 11.31 | cgd8_1770 | 11.07 | cgd5_10 | 10.91 |
| cgd3_410 | 12.58 | cgd4_3550 | 11.27 | cgd8_2930 | 11.31 | cgd7_4810 | 11.07 | cgd4_3630 | 10.88 |
| cgd6_4910 | 12.56 | cgd8_2930 | 11.23 | cgd6_710 | 11.26 | cgd7_300 | 11.02 | cgd6_200 | 10.88 |
| cgd3_4150 | 12.46 | cgd6_2330 | 11.22 | cgd6_3790 | 11.25 | cgd7_1730 | 10.97 | cgd6_3460 | 10.81 |
| cgd1_1580 | 12.45 | cgd2_20 | 11.19 | cgd2_790 | 11.23 | cgd7_2430 | 10.85 | cgd6_3990 | 10.72 |
| cgd5_2060 | 12.37 | cgd1_640 | 11.14 | cgd2_200 | 11.22 | cgd8_5230 | 10.77 | cgd1_1580 | 10.66 |
| cgd2_4320 | 12.34 | cgd6_2450 | 11.06 | cgd6_40 | 11.14 | cgd4_3630 | 10.76 | cgd3_4150 | 10.63 |
| cgd7_360 | 12.32 | cgd7_1730 | 11.05 | cgd2_490 | 11.11 | cgd2_790 | 10.73 | cgd3_410 | 10.57 |
| cgd6_4860 | 12.17 | cgd3_1570 | 11.03 | cgd8_440 | 11.09 | cgd2_940 | 10.69 | cgd6_4910 | 10.56 |
| cgd1_880 | 12.15 | cgd6_4460 | 11.00 | cgd7_300 | 11.07 | cgd7_4880 | 10.66 | cgd7_3010 | 10.46 |
| cgd1_2400 | 12.10 | cgd6_3790 | 10.91 | cgd7_3790 | 11.07 | cgd8_1720 | 10.65 | cgd3_1570 | 10.40 |

| | | | | | | | | | |
|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
| cgd8_5340 | 12.04 | cgd6_5440 | 10.90 | cgd4_1910 | 11.07 | cgd2_2110 | 10.62 | cgd2_4320 | 10.37 |
| cgd8_3770 | 12.04 | cgd7_360 | 10.85 | cgd4_2260 | 11.04 | cgd2_200 | 10.58 | cgd7_4810 | 10.33 |
| cgd6_1430 | 12.04 | cgd5_1210 | 10.85 | cgd5_10 | 10.94 | cgd1_1580 | 10.55 | cgd5_3160 | 10.33 |
| cgd7_3010 | 11.99 | cgd4_2260 | 10.80 | cgd2_20 | 10.92 | cgd5_10 | 10.55 | cgd5_2060 | 10.32 |
| cgd5_1470 | 11.93 | cgd2_3110 | 10.78 | cgd7_400 | 10.90 | cgd7_4020 | 10.54 | cgd3_3940 | 10.30 |
| cgd2_430 | 11.93 | cgd7_3120 | 10.75 | cgd8_1770 | 10.89 | cgd7_400 | 10.50 | cgd6_2450 | 10.27 |
| cgd3_3340 | 11.88 | cgd8_1720 | 10.73 | cgd7_4880 | 10.82 | cgd4_3620 | 10.46 | cgd8_5340 | 10.26 |
| cgd8_2050 | 11.88 | cgd8_1160 | 10.71 | cgd6_4470 | 10.80 | cgd6_4910 | 10.34 | cgd6_1430 | 10.21 |
| cgd4_3400 | 11.82 | cgd8_440 | 10.69 | cgd6_2450 | 10.77 | cgd3_410 | 10.31 | cgd1_2400 | 10.20 |
| cgd6_4470 | 11.80 | cgd5_1220 | 10.62 | cgd6_3010 | 10.74 | cgd4_680 | 10.30 | cgd7_360 | 10.18 |
| cgd5_40 | 11.78 | cgd7_1280 | 10.59 | cgd7_1730 | 10.72 | cgd5_3160 | 10.28 | cgd2_790 | 10.17 |
| cgd7_4790 | 11.77 | cgd7_3790 | 10.54 | cgd5_1210 | 10.61 | cgd3_4150 | 10.28 | cgd6_4860 | 10.13 |
| cgd5_3160 | 11.72 | cgd5_10 | 10.49 | cgd7_360 | 10.55 | cgd1_590 | 10.27 | cgd7_300 | 10.12 |
| cgd7_940 | 11.71 | cgd4_1910 | 10.49 | cgd8_1720 | 10.53 | cgd4_3220 | 10.27 | cgd7_3120 | 10.09 |
| cgd6_780 | 11.70 | cgd6_3920 | 10.35 | cgd6_120 | 10.52 | cgd4_2720 | 10.23 | cgd7_1730 | 10.09 |
| cgd8_4620 | 11.68 | cgd5_1510 | 10.34 | cgd5_1960 | 10.50 | cgd3_1570 | 10.21 | cgd6_780 | 10.06 |

Supplementary Table 5. Raw mRNA reads from time series experiment.

Ct = count; CV = coefficient of variation; S. typhi = *Salmonella typhimurium*; C.p = *Cryptosporidium parvum*; C.h = *Cryptosporidium hominis*; Spor = Sporozoites

| Probe Name | Species Name | Avg Ct | Min Ct | Max Ct | % CV | S. typhi+ | C.p Spor | C.h Spor | Cells alone | 120 h C.p + | 120 h C. h + | 96 h C.p + | 96 h C. h + | 48 h C.p + | 48 h C. h + | 24 h C.p + | 24 h C. h + |
|------------|---------------------|---------|--------|--------|--------|-----------|----------|----------|-------------|-------------|--------------|------------|-------------|------------|-------------|------------|-------------|
| ARG1 | <i>Homo sapiens</i> | 12.17 | 9 | 17 | 20.39 | 11 | 17 | 14 | 14 | 11 | 15 | 10 | 9 | 13 | 12 | 9 | 11 |
| ARG2 | <i>Homo sapiens</i> | 175.25 | 9 | 327 | 54.08 | 249 | 14 | 9 | 194 | 160 | 209 | 274 | 107 | 327 | 196 | 178 | 186 |
| BCL2 | <i>Homo sapiens</i> | 15 | 6 | 22 | 35.05 | 20 | 18 | 9 | 20 | 6 | 20 | 13 | 9 | 14 | 12 | 22 | 17 |
| CAMP | <i>Homo sapiens</i> | 13.42 | 9 | 18 | 20.71 | 9 | 15 | 15 | 14 | 18 | 10 | 17 | 10 | 12 | 14 | 13 | 14 |
| CASP1 | <i>Homo sapiens</i> | 511.58 | 11 | 958 | 59.04 | 286 | 17 | 11 | 595 | 534 | 796 | 958 | 294 | 552 | 617 | 794 | 685 |
| CASP3 | <i>Homo sapiens</i> | 388.08 | 13 | 687 | 54.33 | 370 | 17 | 13 | 417 | 403 | 552 | 687 | 207 | 436 | 461 | 580 | 514 |
| CASP4 | <i>Homo sapiens</i> | 1163.17 | 22 | 1875 | 53.01 | 926 | 30 | 22 | 1402 | 1306 | 1732 | 1875 | 736 | 1320 | 1504 | 1608 | 1497 |
| CASP5 | <i>Homo sapiens</i> | 53 | 11 | 89 | 49.42 | 37 | 11 | 13 | 45 | 52 | 72 | 89 | 32 | 63 | 83 | 80 | 59 |
| CCL5 | <i>Homo sapiens</i> | 200.33 | 10 | 1128 | 148.99 | 1128 | 10 | 12 | 149 | 96 | 150 | 154 | 46 | 179 | 147 | 174 | 159 |
| CD36 | <i>Homo sapiens</i> | 31.92 | 7 | 67 | 51.59 | 23 | 14 | 7 | 24 | 37 | 54 | 67 | 23 | 33 | 40 | 29 | 32 |
| CISH | <i>Homo sapiens</i> | 27.67 | 7 | 40 | 39.27 | 24 | 7 | 12 | 20 | 32 | 34 | 40 | 23 | 27 | 34 | 40 | 39 |
| CX3CL1 | <i>Homo sapiens</i> | 262.58 | 11 | 853 | 82.6 | 853 | 13 | 11 | 251 | 251 | 341 | 349 | 102 | 242 | 257 | 274 | 207 |
| CXCL8 | <i>Homo sapiens</i> | 9395 | 10 | 44779 | 124.13 | 44779 | 18 | 10 | 7634 | 5502 | 6776 | 9273 | 2944 | 9103 | 8488 | 9462 | 8751 |
| DEFA1 | <i>Homo sapiens</i> | 5.75 | 3 | 10 | 31.57 | 7 | 6 | 6 | 6 | 6 | 5 | 6 | 5 | 3 | 10 | 3 | 6 |
| DEFB1 | <i>Homo sapiens</i> | 550 | 12 | 1234 | 65.32 | 302 | 17 | 12 | 538 | 648 | 1056 | 1234 | 437 | 459 | 576 | 711 | 610 |
| DEFB4B | <i>Homo sapiens</i> | 8.5 | 4 | 14 | 42.71 | 14 | 11 | 5 | 8 | 5 | 6 | 8 | 5 | 10 | 14 | 12 | 4 |
| FAS | <i>Homo sapiens</i> | 83.08 | 5 | 130 | 50.25 | 130 | 8 | 5 | 100 | 75 | 89 | 126 | 49 | 104 | 101 | 113 | 97 |
| FASLG | <i>Homo sapiens</i> | 8.17 | 3 | 13 | 34.57 | 5 | 7 | 10 | 10 | 5 | 11 | 9 | 3 | 13 | 9 | 8 | 8 |
| GUSB | <i>Homo sapiens</i> | 811.08 | 13 | 1438 | 54.22 | 642 | 16 | 13 | 859 | 874 | 1159 | 1438 | 564 | 954 | 944 | 1151 | 1119 |
| HPRT1 | <i>Homo sapiens</i> | 1805 | 12 | 3124 | 55.32 | 1549 | 12 | 13 | 1965 | 1822 | 2429 | 3124 | 1069 | 2168 | 2286 | 2852 | 2371 |
| ICAM1 | <i>Homo sapiens</i> | 2698.58 | 3 | 12153 | 117.14 | 12153 | 3 | 4 | 2126 | 1508 | 2005 | 2589 | 796 | 2855 | 2626 | 3037 | 2681 |
| IFNG | <i>Homo sapiens</i> | 11.25 | 6 | 21 | 39.23 | 11 | 21 | 11 | 8 | 9 | 8 | 18 | 6 | 8 | 11 | 14 | 10 |
| IL18 | <i>Homo sapiens</i> | 450.42 | 12 | 760 | 54.17 | 451 | 18 | 12 | 464 | 419 | 553 | 710 | 253 | 581 | 544 | 760 | 640 |
| IL1B | <i>Homo sapiens</i> | 495.25 | 16 | 2781 | 149.87 | 2781 | 18 | 16 | 351 | 200 | 260 | 258 | 113 | 450 | 427 | 569 | 500 |
| IL1R1 | <i>Homo sapiens</i> | 274.33 | 18 | 511 | 53.7 | 176 | 19 | 18 | 290 | 326 | 410 | 511 | 209 | 299 | 321 | 368 | 345 |
| IL33 | <i>Homo sapiens</i> | 29.25 | 12 | 49 | 36.21 | 27 | 17 | 12 | 34 | 29 | 31 | 33 | 15 | 29 | 35 | 49 | 40 |

| | | | | | | | | | | | | | | | | | |
|-----------|--------------------------|----------|----|-------|--------|-------|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| IL6 | <i>Homo sapiens</i> | 133 | 16 | 694 | 135.91 | 694 | 24 | 16 | 81 | 80 | 74 | 102 | 45 | 140 | 105 | 110 | 125 |
| NFKB1 | <i>Homo sapiens</i> | 184 | 8 | 556 | 75.54 | 556 | 16 | 8 | 152 | 139 | 214 | 240 | 103 | 174 | 192 | 212 | 202 |
| PTGS2 | <i>Homo sapiens</i> | 440.42 | 8 | 1573 | 90.88 | 1573 | 8 | 14 | 332 | 372 | 514 | 626 | 221 | 389 | 398 | 439 | 399 |
| PYCARD | <i>Homo sapiens</i> | 1059.92 | 20 | 1912 | 55.94 | 650 | 33 | 20 | 1119 | 1210 | 1550 | 1912 | 724 | 1233 | 1298 | 1557 | 1413 |
| RELA | <i>Homo sapiens</i> | 1721.75 | 12 | 2842 | 52.79 | 2417 | 14 | 12 | 1771 | 1841 | 2443 | 2842 | 1044 | 1961 | 2002 | 2154 | 2160 |
| RPL19 | <i>Homo sapiens</i> | 37761.08 | 24 | 64785 | 54.67 | 31880 | 24 | 24 | 42970 | 40816 | 56030 | 64785 | 23803 | 43444 | 45243 | 54611 | 49503 |
| SDHA | <i>Homo sapiens</i> | 791.67 | 6 | 1473 | 55.51 | 634 | 13 | 6 | 766 | 889 | 1052 | 1473 | 511 | 975 | 1002 | 1094 | 1085 |
| SIRT1 | <i>Homo sapiens</i> | 110.17 | 13 | 182 | 46.29 | 130 | 20 | 13 | 110 | 126 | 153 | 182 | 78 | 104 | 147 | 140 | 119 |
| SOCS1 | <i>Homo sapiens</i> | 186.92 | 12 | 336 | 53.03 | 236 | 12 | 14 | 186 | 187 | 232 | 336 | 97 | 233 | 190 | 263 | 257 |
| SOCS2 | <i>Homo sapiens</i> | 57.75 | 3 | 113 | 56.73 | 113 | 8 | 3 | 47 | 54 | 72 | 88 | 28 | 67 | 75 | 85 | 53 |
| SOCS3 | <i>Homo sapiens</i> | 637.83 | 14 | 1038 | 51.63 | 795 | 16 | 14 | 677 | 719 | 852 | 1038 | 369 | 780 | 725 | 815 | 854 |
| SOCS4 | <i>Homo sapiens</i> | 491.75 | 10 | 867 | 54.35 | 373 | 22 | 10 | 509 | 574 | 712 | 867 | 304 | 568 | 614 | 665 | 683 |
| STAT6 | <i>Homo sapiens</i> | 667.83 | 7 | 1142 | 53.67 | 602 | 17 | 7 | 692 | 746 | 1034 | 1142 | 440 | 717 | 825 | 901 | 891 |
| TRAF2 | <i>Homo sapiens</i> | 246.58 | 7 | 394 | 53.34 | 209 | 12 | 7 | 246 | 279 | 362 | 392 | 153 | 272 | 321 | 394 | 312 |
| cgd1_1660 | <i>C. parvum Iowa II</i> | 41.92 | 3 | 389 | 261.12 | 10 | 389 | 27 | 8 | 7 | 13 | 10 | 3 | 8 | 9 | 10 | 9 |
| cgd1_2270 | <i>C. parvum Iowa II</i> | 39.25 | 5 | 372 | 267.22 | 8 | 372 | 20 | 6 | 10 | 6 | 10 | 5 | 14 | 10 | 5 | 5 |
| cgd1_2400 | <i>C. parvum Iowa II</i> | 117.92 | 3 | 1260 | 305.1 | 3 | 1260 | 39 | 12 | 13 | 11 | 12 | 15 | 12 | 11 | 10 | 17 |
| cgd1_2880 | <i>C. parvum Iowa II</i> | 20.33 | 10 | 55 | 58.84 | 15 | 55 | 29 | 13 | 10 | 19 | 21 | 16 | 13 | 20 | 15 | 18 |
| cgd1_300 | <i>C. parvum Iowa II</i> | 142.67 | 10 | 1539 | 308.24 | 12 | 1539 | 30 | 18 | 12 | 17 | 14 | 10 | 12 | 14 | 17 | 17 |
| cgd1_3810 | <i>C. parvum Iowa II</i> | 97.08 | 3 | 1057 | 311.51 | 10 | 1057 | 35 | 4 | 3 | 7 | 12 | 4 | 4 | 12 | 12 | 5 |
| cgd1_640 | <i>C. parvum Iowa II</i> | 466.08 | 8 | 5297 | 326.44 | 8 | 5297 | 85 | 16 | 14 | 27 | 47 | 21 | 18 | 21 | 17 | 22 |
| cgd1_880 | <i>C. parvum Iowa II</i> | 63.5 | 7 | 614 | 273.13 | 12 | 614 | 15 | 11 | 9 | 21 | 23 | 13 | 12 | 18 | 7 | 7 |
| cgd1_910 | <i>C. parvum Iowa II</i> | 70.67 | 7 | 685 | 274.05 | 12 | 685 | 40 | 12 | 12 | 10 | 22 | 14 | 9 | 12 | 13 | 7 |
| cgd2_1070 | <i>C. parvum Iowa II</i> | 32.5 | 9 | 203 | 165.62 | 21 | 203 | 23 | 13 | 16 | 17 | 20 | 9 | 14 | 18 | 19 | 17 |
| cgd2_20 | <i>C. parvum Iowa II</i> | 166.75 | 10 | 1785 | 305.69 | 21 | 1785 | 51 | 16 | 13 | 15 | 23 | 11 | 11 | 22 | 23 | 10 |
| cgd2_200 | <i>C. parvum Iowa II</i> | 394 | 5 | 4372 | 318.19 | 8 | 4372 | 180 | 9 | 5 | 23 | 40 | 35 | 11 | 19 | 14 | 12 |
| cgd2_2200 | <i>C. parvum Iowa II</i> | 38.58 | 9 | 307 | 219.71 | 12 | 307 | 31 | 14 | 12 | 10 | 22 | 15 | 9 | 12 | 10 | 9 |

Supplementary Material

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|-----------|-----------------------------|--------|----|------|--------|----|------|----|----|----|----|----|----|----|----|----|----|
| cgd2_2540 | <i>C. parvum</i> Iowa II | 31.5 | 4 | 286 | 254.72 | 4 | 286 | 15 | 6 | 5 | 7 | 13 | 14 | 10 | 5 | 7 | 6 |
| cgd2_3000 | <i>C. parvum</i> Iowa II | 40.67 | 1 | 398 | 276.96 | 5 | 398 | 19 | 7 | 7 | 9 | 12 | 1 | 12 | 9 | 6 | 3 |
| cgd2_3070 | <i>C. parvum</i> Iowa II | 139.08 | 24 | 1299 | 262.72 | 30 | 1299 | 49 | 31 | 25 | 40 | 28 | 47 | 24 | 45 | 26 | 25 |
| cgd2_3500 | <i>C. parvum</i> Iowa II | 46.75 | 2 | 453 | 273.94 | 2 | 453 | 26 | 10 | 9 | 9 | 7 | 5 | 9 | 11 | 12 | 8 |
| cgd2_3730 | <i>C. parvum</i> Iowa II | 121 | 4 | 1317 | 311.39 | 9 | 1317 | 42 | 9 | 10 | 4 | 19 | 11 | 6 | 9 | 7 | 9 |
| cgd2_4300 | <i>C. parvum</i> Iowa II | 267.17 | 6 | 3103 | 334.27 | 10 | 3103 | 6 | 7 | 7 | 8 | 21 | 6 | 8 | 11 | 9 | 10 |
| cgd2_4320 | <i>C. parvum</i> Iowa II | 30.5 | 9 | 177 | 151.85 | 15 | 177 | 19 | 18 | 16 | 18 | 26 | 13 | 9 | 17 | 20 | 18 |
| cgd2_8200 | <i>C. parvum</i> Iowa II | 103.67 | 7 | 1084 | 297.87 | 13 | 1084 | 34 | 12 | 11 | 12 | 16 | 11 | 16 | 15 | 13 | 7 |
| cgd3_1300 | <i>C. parvum</i> Iowa II | 119.25 | 11 | 1176 | 279.22 | 17 | 1176 | 54 | 15 | 22 | 21 | 29 | 11 | 19 | 27 | 22 | 18 |
| cgd3_1400 | <i>C. parvum</i> Iowa II | 17.33 | 8 | 35 | 41.11 | 8 | 35 | 23 | 15 | 15 | 11 | 17 | 11 | 18 | 19 | 14 | 22 |
| cgd3_1570 | <i>C. parvum</i> Iowa II | 216.5 | 10 | 2402 | 317.91 | 11 | 2402 | 22 | 13 | 16 | 17 | 30 | 20 | 14 | 26 | 17 | 10 |
| cgd3_1940 | <i>C. parvum</i> Iowa II | 150.5 | 16 | 1543 | 291.48 | 21 | 1543 | 58 | 18 | 16 | 19 | 30 | 18 | 16 | 16 | 30 | 21 |
| cgd3_2250 | <i>C. parvum</i> Iowa II | 49 | 6 | 480 | 277.05 | 11 | 480 | 15 | 8 | 9 | 7 | 10 | 9 | 13 | 9 | 6 | 11 |
| cgd3_2940 | <i>C. parvum</i> Iowa II | 18.08 | 11 | 56 | 70.13 | 11 | 56 | 26 | 15 | 18 | 11 | 12 | 11 | 14 | 14 | 12 | 17 |
| cgd3_3300 | <i>C. parvum</i> Iowa II | 35.58 | 10 | 252 | 191.83 | 19 | 252 | 24 | 16 | 11 | 19 | 17 | 13 | 17 | 14 | 10 | 15 |
| cgd3_3770 | <i>C. parvum</i> Iowa II | 375.83 | 5 | 4332 | 331.52 | 9 | 4332 | 57 | 9 | 12 | 10 | 27 | 21 | 9 | 13 | 5 | 6 |
| cgd3_3790 | <i>C. parvum</i> Iowa II | 28.67 | 1 | 224 | 215.83 | 7 | 224 | 27 | 13 | 8 | 17 | 14 | 5 | 1 | 10 | 11 | 7 |
| cgd3_3930 | <i>C. parvum</i> Iowa II | 157.33 | 9 | 1692 | 307.2 | 17 | 1692 | 30 | 9 | 14 | 18 | 22 | 13 | 21 | 9 | 23 | 20 |
| cgd3_4150 | <i>C. parvum</i> Iowa II | 93.5 | 5 | 1000 | 305.42 | 11 | 1000 | 32 | 5 | 10 | 11 | 16 | 7 | 8 | 5 | 11 | 6 |
| cgd3_4260 | <i>C. parvum</i> Iowa II | 21.75 | 3 | 188 | 241.02 | 8 | 188 | 4 | 11 | 10 | 5 | 10 | 6 | 4 | 5 | 7 | 3 |
| cgd3_5100 | <i>C. parvum</i> Iowa II | 180.42 | 3 | 1984 | 314.89 | 9 | 1984 | 51 | 3 | 10 | 16 | 21 | 28 | 8 | 12 | 12 | 11 |
| cgd3_7600 | <i>C. parvum</i> Iowa II | 65 | 5 | 651 | 284.14 | 6 | 651 | 32 | 5 | 9 | 6 | 18 | 7 | 11 | 13 | 11 | 11 |

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|-----------|-----------------------------|--------|----|------|--------|----|------|----|----|----|----|----|----|----|----|----|----|
| cgd4_1940 | <i>C. parvum</i> Iowa II | 21.67 | 6 | 136 | 166.98 | 14 | 136 | 18 | 6 | 11 | 14 | 13 | 10 | 7 | 7 | 14 | 10 |
| cgd4_2260 | <i>C. parvum</i> Iowa II | 53.33 | 6 | 522 | 276.96 | 8 | 522 | 29 | 11 | 8 | 10 | 9 | 6 | 10 | 9 | 7 | 11 |
| cgd4_3080 | <i>C. parvum</i> Iowa II | 14.67 | 5 | 69 | 118.89 | 6 | 69 | 14 | 7 | 9 | 8 | 12 | 5 | 14 | 13 | 13 | 6 |
| cgd4_3160 | <i>C. parvum</i> Iowa II | 30.42 | 11 | 98 | 73.49 | 31 | 98 | 30 | 11 | 25 | 22 | 27 | 29 | 15 | 20 | 35 | 22 |
| cgd4_3550 | <i>C. parvum</i> Iowa II | 61.67 | 6 | 599 | 274.56 | 10 | 599 | 26 | 10 | 9 | 15 | 6 | 8 | 15 | 14 | 8 | 20 |
| cgd4_3620 | <i>C. parvum</i> Iowa II | 34.08 | 2 | 291 | 237.93 | 9 | 291 | 23 | 6 | 7 | 10 | 15 | 11 | 10 | 17 | 8 | 2 |
| cgd4_4310 | <i>C. parvum</i> Iowa II | 63.25 | 3 | 596 | 265.56 | 18 | 596 | 37 | 3 | 13 | 19 | 12 | 8 | 14 | 13 | 13 | 13 |
| cgd4_4460 | <i>C. parvum</i> Iowa II | 20.67 | 10 | 68 | 75.65 | 20 | 68 | 27 | 10 | 11 | 17 | 17 | 16 | 12 | 21 | 14 | 15 |
| cgd5_10 | <i>C. parvum</i> Iowa II | 166.75 | 2 | 1818 | 312 | 12 | 1818 | 65 | 4 | 2 | 17 | 15 | 21 | 15 | 17 | 7 | 8 |
| cgd5_1470 | <i>C. parvum</i> Iowa II | 73.92 | 4 | 787 | 303.84 | 11 | 787 | 16 | 9 | 9 | 6 | 12 | 4 | 7 | 10 | 11 | 5 |
| cgd5_2370 | <i>C. parvum</i> Iowa II | 31.25 | 4 | 259 | 229.89 | 4 | 259 | 16 | 12 | 13 | 12 | 17 | 6 | 8 | 13 | 5 | 10 |
| cgd5_2800 | <i>C. parvum</i> Iowa II | 49.83 | 4 | 475 | 269.09 | 6 | 475 | 33 | 11 | 7 | 10 | 8 | 13 | 12 | 12 | 7 | 4 |
| cgd5_3040 | <i>C. parvum</i> Iowa II | 57.92 | 3 | 584 | 286.25 | 10 | 584 | 27 | 3 | 8 | 12 | 14 | 3 | 8 | 10 | 8 | 8 |
| cgd5_4590 | <i>C. parvum</i> Iowa II | 30.33 | 7 | 184 | 160.3 | 20 | 184 | 19 | 13 | 17 | 7 | 21 | 13 | 16 | 17 | 25 | 12 |
| cgd6_10 | <i>C. parvum</i> Iowa II | 158.33 | 7 | 1736 | 313.8 | 20 | 1736 | 14 | 13 | 18 | 19 | 18 | 13 | 16 | 14 | 12 | 7 |
| cgd6_1070 | <i>C. parvum</i> Iowa II | 10.17 | 4 | 41 | 102.55 | 6 | 41 | 18 | 8 | 8 | 5 | 5 | 4 | 7 | 4 | 6 | 10 |
| cgd6_1080 | <i>C. parvum</i> Iowa II | 12.33 | 4 | 45 | 89.91 | 6 | 45 | 7 | 6 | 5 | 11 | 16 | 4 | 17 | 10 | 12 | 9 |
| cgd6_2170 | <i>C. parvum</i> Iowa II | 70.58 | 7 | 706 | 283.57 | 9 | 706 | 21 | 12 | 10 | 13 | 12 | 7 | 15 | 12 | 21 | 9 |
| cgd6_2330 | <i>C. parvum</i> Iowa II | 19.58 | 3 | 109 | 147.56 | 11 | 109 | 30 | 11 | 6 | 11 | 11 | 3 | 8 | 10 | 12 | 13 |
| cgd6_2600 | <i>C. parvum</i> Iowa II | 241.33 | 6 | 2760 | 328.68 | 7 | 2760 | 33 | 6 | 9 | 10 | 17 | 12 | 9 | 18 | 8 | 7 |
| cgd6_3010 | <i>C. parvum</i> Iowa II | 35 | 5 | 329 | 264.66 | 5 | 329 | 15 | 8 | 6 | 5 | 11 | 9 | 7 | 9 | 10 | 6 |
| cgd6_3800 | <i>C. parvum</i> Iowa II | 35.67 | 12 | 147 | 100.92 | 31 | 147 | 41 | 18 | 15 | 30 | 33 | 12 | 22 | 24 | 30 | 25 |
| cgd6_3850 | <i>C. parvum</i> Iowa II | 61.5 | 3 | 619 | 285.71 | 3 | 619 | 31 | 12 | 10 | 7 | 13 | 5 | 10 | 10 | 13 | 5 |

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|-----------|-----------------------------|--------|----|------|--------|----|------|-----|----|----|----|----|----|----|----|----|----|
| cgd6_3920 | <i>C. parvum</i> Iowa II | 329.5 | 6 | 3744 | 326.37 | 9 | 3744 | 63 | 6 | 7 | 15 | 31 | 18 | 11 | 23 | 17 | 10 |
| cgd6_3990 | <i>C. parvum</i> Iowa II | 115.83 | 6 | 1265 | 312.47 | 8 | 1265 | 28 | 13 | 8 | 6 | 16 | 8 | 7 | 8 | 15 | 8 |
| cgd6_400 | <i>C. parvum</i> Iowa II | 290.58 | 14 | 3229 | 318.46 | 25 | 3229 | 20 | 30 | 17 | 24 | 35 | 14 | 20 | 21 | 30 | 22 |
| cgd6_4190 | <i>C. parvum</i> Iowa II | 26 | 3 | 234 | 252.18 | 4 | 234 | 14 | 6 | 7 | 7 | 5 | 7 | 10 | 9 | 6 | 3 |
| cgd6_4620 | <i>C. parvum</i> Iowa II | 66.42 | 4 | 676 | 289.29 | 9 | 676 | 35 | 7 | 4 | 12 | 13 | 7 | 11 | 9 | 9 | 5 |
| cgd6_4630 | <i>C. parvum</i> Iowa II | 93.25 | 2 | 999 | 305.98 | 2 | 999 | 30 | 16 | 12 | 6 | 7 | 9 | 8 | 8 | 10 | 12 |
| cgd6_4860 | <i>C. parvum</i> Iowa II | 99.92 | 7 | 1041 | 296.76 | 7 | 1041 | 41 | 9 | 22 | 9 | 16 | 8 | 13 | 14 | 9 | 10 |
| cgd6_4910 | <i>C. parvum</i> Iowa II | 128.25 | 7 | 1385 | 308.67 | 11 | 1385 | 41 | 13 | 10 | 9 | 17 | 13 | 7 | 10 | 11 | 12 |
| cgd6_5400 | <i>C. parvum</i> Iowa II | 68 | 1 | 758 | 319.6 | 2 | 758 | 14 | 5 | 3 | 7 | 9 | 1 | 4 | 6 | 6 | 1 |
| cgd6_5410 | <i>C. parvum</i> Iowa II | 461.83 | 10 | 5223 | 324.72 | 10 | 5223 | 114 | 18 | 19 | 17 | 48 | 28 | 19 | 23 | 12 | 11 |
| cgd7_1200 | <i>C. parvum</i> Iowa II | 43.83 | 9 | 353 | 222.91 | 17 | 353 | 41 | 13 | 12 | 13 | 9 | 14 | 15 | 13 | 11 | 15 |
| cgd7_1300 | <i>C. parvum</i> Iowa II | 71.83 | 17 | 618 | 239.52 | 24 | 618 | 33 | 18 | 17 | 19 | 24 | 19 | 23 | 26 | 19 | 22 |
| cgd7_1460 | <i>C. parvum</i> Iowa II | 70.33 | 8 | 713 | 287.83 | 13 | 713 | 25 | 9 | 10 | 15 | 9 | 8 | 13 | 10 | 10 | 9 |
| cgd7_1830 | <i>C. parvum</i> Iowa II | 8.75 | 4 | 37 | 106.56 | 5 | 37 | 14 | 7 | 5 | 4 | 7 | 4 | 5 | 5 | 8 | 4 |
| cgd7_2110 | <i>C. parvum</i> Iowa II | 67.42 | 8 | 672 | 282.52 | 11 | 672 | 27 | 8 | 10 | 12 | 10 | 9 | 18 | 9 | 12 | 11 |
| cgd7_2250 | <i>C. parvum</i> Iowa II | 21 | 9 | 93 | 109.76 | 15 | 93 | 25 | 11 | 10 | 18 | 14 | 9 | 15 | 14 | 13 | 15 |
| cgd7_2280 | <i>C. parvum</i> Iowa II | 59.75 | 6 | 582 | 275.38 | 11 | 582 | 24 | 8 | 14 | 8 | 17 | 11 | 9 | 15 | 12 | 6 |
| cgd7_2300 | <i>C. parvum</i> Iowa II | 383.33 | 8 | 4389 | 329.1 | 8 | 4389 | 60 | 12 | 14 | 10 | 44 | 11 | 16 | 13 | 13 | 10 |
| cgd7_2430 | <i>C. parvum</i> Iowa II | 269.42 | 7 | 2988 | 317.82 | 15 | 2988 | 66 | 20 | 14 | 13 | 27 | 24 | 17 | 20 | 22 | 7 |
| cgd7_2540 | <i>C. parvum</i> Iowa II | 76.17 | 5 | 796 | 297.76 | 6 | 796 | 31 | 11 | 11 | 10 | 7 | 6 | 12 | 5 | 12 | 7 |
| cgd7_3010 | <i>C. parvum</i> Iowa II | 43.58 | 3 | 399 | 257.05 | 11 | 399 | 13 | 8 | 6 | 10 | 23 | 13 | 12 | 3 | 12 | 13 |
| cgd7_3020 | <i>C. parvum</i> Iowa II | 26.17 | 8 | 158 | 159.64 | 15 | 158 | 23 | 12 | 9 | 8 | 10 | 13 | 18 | 15 | 21 | 12 |

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|-----------|-----------------------------|--------|----|------|--------|----|------|-----|----|----|----|----|----|----|----|----|----|
| cgd7_3240 | <i>C. parvum</i> Iowa II | 39.33 | 8 | 340 | 241.11 | 8 | 340 | 27 | 8 | 10 | 8 | 17 | 10 | 11 | 12 | 9 | 12 |
| cgd7_3250 | <i>C. parvum</i> Iowa II | 99.33 | 2 | 1064 | 305.92 | 8 | 1064 | 33 | 2 | 6 | 8 | 14 | 10 | 14 | 10 | 13 | 10 |
| cgd7_4050 | <i>C. parvum</i> Iowa II | 71.25 | 8 | 717 | 285.55 | 12 | 717 | 31 | 13 | 10 | 9 | 10 | 8 | 8 | 15 | 11 | 11 |
| cgd7_4800 | <i>C. parvum</i> Iowa II | 326.83 | 5 | 3696 | 324.71 | 7 | 3696 | 86 | 6 | 5 | 17 | 27 | 32 | 9 | 21 | 7 | 9 |
| cgd7_7000 | <i>C. parvum</i> Iowa II | 12.67 | 3 | 49 | 96.06 | 14 | 49 | 15 | 11 | 6 | 6 | 6 | 3 | 6 | 8 | 15 | 13 |
| cgd7_7900 | <i>C. parvum</i> Iowa II | 45.25 | 2 | 441 | 275.54 | 9 | 441 | 13 | 9 | 6 | 12 | 14 | 9 | 6 | 14 | 8 | 2 |
| cgd8_1840 | <i>C. parvum</i> Iowa II | 62.5 | 17 | 448 | 194.61 | 29 | 448 | 41 | 23 | 17 | 31 | 23 | 19 | 27 | 39 | 32 | 21 |
| cgd8_2340 | <i>C. parvum</i> Iowa II | 36 | 3 | 291 | 223.35 | 17 | 291 | 19 | 15 | 3 | 13 | 16 | 11 | 11 | 12 | 13 | 11 |
| cgd8_3230 | <i>C. parvum</i> Iowa II | 153.33 | 3 | 1691 | 315.91 | 6 | 1691 | 49 | 9 | 3 | 10 | 20 | 6 | 13 | 14 | 11 | 8 |
| cgd8_3390 | <i>C. parvum</i> Iowa II | 43.5 | 6 | 366 | 233.96 | 23 | 366 | 29 | 13 | 7 | 9 | 15 | 13 | 6 | 14 | 10 | 17 |
| cgd8_3460 | <i>C. parvum</i> Iowa II | 10.5 | 6 | 18 | 34.82 | 11 | 18 | 6 | 7 | 8 | 12 | 12 | 13 | 9 | 15 | 8 | 7 |
| cgd8_3480 | <i>C. parvum</i> Iowa II | 73.17 | 3 | 785 | 306.43 | 7 | 785 | 17 | 5 | 8 | 8 | 8 | 3 | 13 | 10 | 10 | 4 |
| cgd8_3520 | <i>C. parvum</i> Iowa II | 600 | 8 | 6855 | 328.35 | 11 | 6855 | 132 | 8 | 10 | 26 | 53 | 27 | 25 | 27 | 14 | 12 |
| cgd8_3770 | <i>C. parvum</i> Iowa II | 65.92 | 10 | 608 | 259.11 | 14 | 608 | 30 | 19 | 17 | 12 | 20 | 12 | 10 | 18 | 12 | 19 |
| cgd8_4050 | <i>C. parvum</i> Iowa II | 102.42 | 8 | 1005 | 277.63 | 24 | 1005 | 35 | 25 | 20 | 13 | 20 | 11 | 8 | 24 | 27 | 17 |
| cgd8_4220 | <i>C. parvum</i> Iowa II | 56.75 | 17 | 419 | 201.18 | 20 | 419 | 34 | 25 | 25 | 25 | 28 | 21 | 17 | 26 | 18 | 23 |
| cgd8_4320 | <i>C. parvum</i> Iowa II | 222.17 | 4 | 2447 | 315.47 | 4 | 2447 | 72 | 21 | 8 | 18 | 27 | 16 | 14 | 14 | 12 | 13 |
| cgd8_4500 | <i>C. parvum</i> Iowa II | 21.33 | 5 | 133 | 167.46 | 15 | 133 | 28 | 6 | 5 | 13 | 6 | 5 | 10 | 13 | 11 | 11 |
| cgd8_600 | <i>C. parvum</i> Iowa II | 101 | 4 | 1058 | 298.43 | 15 | 1058 | 15 | 12 | 15 | 4 | 21 | 8 | 20 | 20 | 12 | 12 |
| cgd_2_140 | <i>C. parvum</i> Iowa II | 192.08 | 5 | 2186 | 326.93 | 5 | 2186 | 35 | 8 | 7 | 10 | 9 | 8 | 11 | 5 | 12 | 9 |
| cgd2_3270 | <i>C. parvum</i> Iowa II | 19.67 | 3 | 118 | 164.44 | 6 | 118 | 39 | 10 | 10 | 9 | 6 | 7 | 11 | 12 | 3 | 5 |
| cgd5_3160 | <i>C. parvum</i> Iowa II | 38.25 | 6 | 326 | 237.2 | 13 | 326 | 24 | 12 | 11 | 6 | 9 | 13 | 8 | 15 | 10 | 12 |
| cgd6_2090 | <i>C. parvum</i> Iowa II | 11.83 | 1 | 58 | 133.95 | 7 | 58 | 26 | 8 | 5 | 5 | 11 | 6 | 7 | 5 | 1 | 3 |

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|------------------|-----------------------------|-------|----|-----|--------|----|-----|----|----|----|----|----|----|----|----|----|----|
| cgd6_4270 | <i>C. parvum</i> Iowa II | 27.08 | 12 | 159 | 153.65 | 16 | 159 | 21 | 15 | 12 | 17 | 15 | 13 | 16 | 15 | 14 | 12 |
|------------------|-----------------------------|-------|----|-----|--------|----|-----|----|----|----|----|----|----|----|----|----|----|