- **Figure S1.** CEN2 depletion does not affect the distribution of ISP1, rhoptries, or dense granules. (A) Images of cKD parasites treated for 120 h with ATc (-Shld1/+ATc), labeled with antibodies for ISP1 (red), a marker for the apical cap, and IMC1 (green), a marker for the cortex of mature and daughter parasites. Scale bar = $2 \mu m$.
- (B-D) Images of RH Δhx parasites (WT, B), and cKD parasites cultured with Shld1 (+Shld1/-ATc, C), or treated for 48 h with ATc (-Shld1/+ATc, D), labeled with antibodies for the rhoptries. Red: anti-RON2-4, a marker for the rhoptry neck. Green: anti-ROP2,3,4, markers for the rhoptry bulb. Scale bars = 2 μ m.
- (E-G) Images of RH Δhx parasites (WT, E), and cKD parasites cultured with Shld1 (+Shld1/-ATc, F), or treated for 48 h with ATc (-Shld1/+ATc, G), labeled with antibodies for GRA8 (red), a marker for the dense granules, and IMC1 (green). Scale bars = 2 μ m.

Figure S2. CEN2 depletion does not have a major impact on construction of the basal complex or inheritance of the apicoplast.

Representative images of cKD parasites cultured with Shld1 (+Shld1/-ATc, A&C) or treated with ATc (-Shld1/+ATc) for 84 h (B) or 87 h (D). The parasites were labeled with antibodies for IMC1 (green), and IAP1 (A&B, red), a marker for the basal complex, or acyl carrier protein (ACP, C&D, red), a marker for the apicoplast. Scale bars = $2 \mu m$.

Table S1. Primers used in this study.

Figure S1

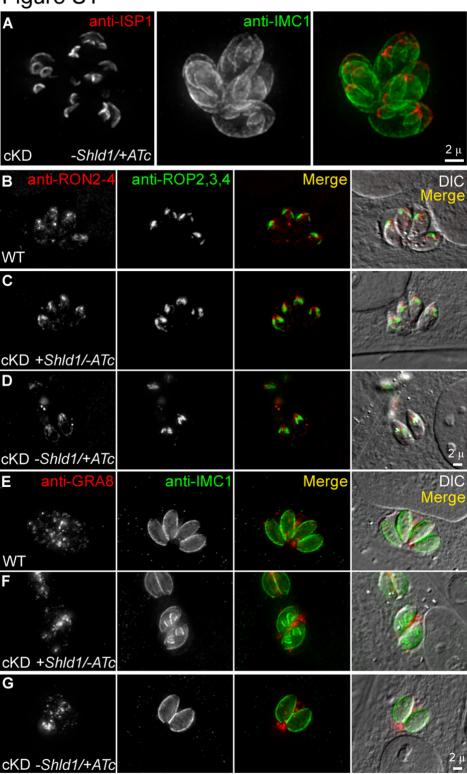


Figure S2

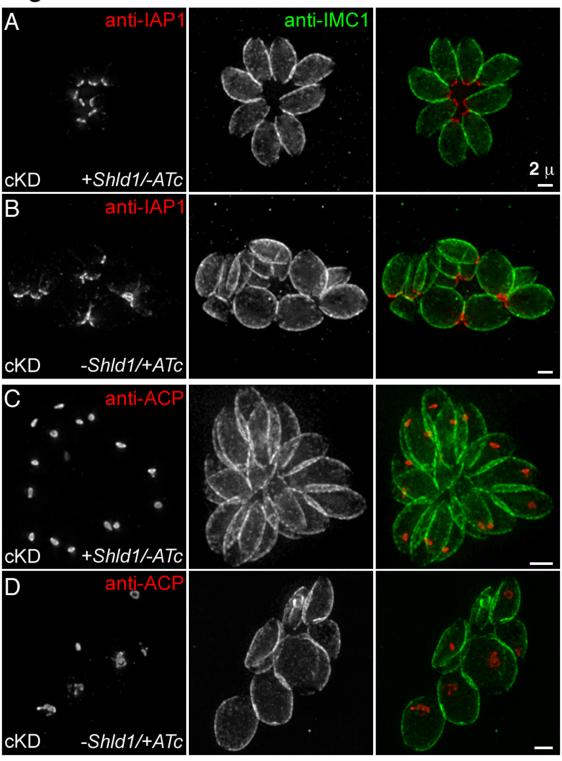


Table S1. Primers used in this study.

Name	Sequence (5' to 3')
S1	ACTGGCTAGCCAAGGCTGTCGATTCAACAGAGAGC
S2	AGTCGCGGCCTCGCACTTTTCGCAGGGCATCTTG
S3	CGATGGATCCCAGCGAGGAGCACTGCGAGGGGCGAG
S4	CTAAAGGGAACAAAAGCTGGGTACCGGTACCGGGCCCCCCCTCG
S5	CTCCGGCTTGCAACCAAGGACCCGTAATACGACTCACTATAGGGC
S6	ATCGAGGACCCCTGATGAACTTGGCTTATTCAT
S7	GCGCAGATCTGCCAATTTACTGACCGTACACC
S8	CAGCGAGGAGCACTGCGAGG
S9	GATCGCTTCTCGGTTCCTACCCTG
AS1	ACTGGGGCCCCTGTGCCCCAAAATGTACCGGAGGC
AS2	ACTGGAATTCGCTCGACAAAAAAAGGCCAAATGTA
AS3	ACGTCTTAAGTCACGGGAAAGTCTTCTTGGTCATGATCG
AS4	CTGCAGGAATTCGATATCAAGCTTAACCGGTTCGACTAAAACAAC
AS5	CGCCCTTGCTCACCATTTTGCTAGCTTTGTCGAAAAAGGGAATTCG
AS6	ATCGGCTAGCGGATCTAAAAGGGAAT
AS7	GCGCCTTAAGCTAGGTGGCGACCGGTCCATCGCCAT
AS8	CAGCTTCGCGGTAATGGCGT
AS9	CCTGTTACGAACGCAAAGATGTGT