Primer name	$5^{\circ} \rightarrow 3^{\circ}$
BPK1-tag F	ATG CGG CCG CTC CTG TTT CTA AGG AC
BPK1-tag R	CCG ATA TCC AGA CGG TTC TGC TTG TAC
3' F	AAG CTA GCT GGG TTT CGG AAG GTG G
3' R	ATG GGC CCA TGT AGG CGC ATC TGT G
5' KO F	ATG CGG CCG CAT TTG ATC GAA GAC AGA C
5' KO R	CCG ATA TCC ACT GGA GGC GCA GAT CTG
In vector, towards 5'	ACA GAT CGC TCC AAC AGC TT
In vector, towards 3'	GCG CAC GGC AGT CAG ATA AC
Screen tag F	CCG GTT GCG CCA AGC ATA
Screen 3' R	GCG TAA CAA ATC GGC TTC TCT
Screen 5' F	CCG TGT CTC TAG TGG AAC CTG
For pGEX-BPK1 F	AGA ATT CGT TGC TTG GGG TCC CAA TCC
For pGEX-BPK1 R	AGC GGC CGC CAG ACG GTT CTG CTT GT
For pGEX-MAG1 F	GGAATTCAGGGTGCCAGAGCTACCAGA
For pGEX-MAG1 R	AGCGGAACAGGCAGCTTGAGCGGCCGCT
For pGEX-MCP4 F	AGA ATT CAT GCA ACC GCG TCA ACT GGC
For pGEX-MCP4 R	AGC GGC CGC TGC TCG TGG AGT CTC TGT T

Table S1. Primers used in this study.

Α.



Figure S1. Quantification of *in vitro* cyst formation. Parental and KO parasites were grown in HFF monolayers on glass coverslips for 4 d under bradyzoites conditions prior to fixation. (A) Fixed samples were probed for the bradyzoite surface antigen SAG2X. Shown is average percentage (with standard deviation) of vacuoles that were positive for SAG2X on 3 coverslips. (B) The cyst wall was stained with DBA prior to enumeration. Shown is average number of cysts per 10 fields of view (with standard deviation) on 3 coverslips. (C) The cyst wall was stained with DBA and ImageJ software was used to determine the cross-sectional area of each cyst. Shown is average cyst size (with standard deviation) from examining 3 coverslips (at least 10 cyst measured per coverslip).