

Table S1: Oligonucleotides (A) and plasmids (B) used in this study.

A

internal #	Target or Primer name	Sequence	Purpose
284	PF3D7_0716900 rv	GGGacgcgtTAACATCAATTTTCTTTTTGGG	cloning GFP-glmS
285	PF3D7_0716900 fw	GGGgcgccgctaaGGGTGTGGTAATTCAAGTACG	
280	PF3D7_0523800 rv	GGGacgcgtATTTCGTTGAATATAATTTTTTAATTG	
281	PF3D7_0523800 fw	GGGgcgccgctaaGTTTTCTTGTGGTATTTAGCTG	
282	PF3D7_0609100 rv	GGGacgcgtATGATTATGACCATGATCATGATC	
283	PF3D7_0609100 fw	GGGgcgccgctaaGGATAGCAGGTGTACGGTTTCTTTATC	
288	PF3D7_1440800 rv	GGGacgcgtATTAGTAATAGAATTTTCATCTTG	
289	PF3D7_1440800 fw	GGGgcgccgctaaCATTGCTTCAAATTTGATGAG	
290	Pf3D7_1135300 rv	GGGacgcgtAGAAGTTTTGGGGCATATTTCTTTG	
338	Pf3D7_0715900 (11)	GGGgcgccgctaaCTGGAATAAAATAGATGGAACGTCTTG	
339	Pf3D7_0715900 (11)	GGGacgcgtAGTATCCCCTTTCAATGTGGAAC	
291	Pf3D7_1135300 fw	GGGgcgccgctaaGTTATATTATAAAAGGATGATTGG	
315	PF3D7_0523800 (1) TGD fw	GCGGCCGCTAAAGGAGCACTAAAGGCCAAAGGAAGT	
316	PF3D7_0523800 (1) TGD rv	acgcgtAATAATGTCATCCTTTTCATTATTAATATT	
317	PF3D7_0609100 (2) TGD fw	GCGGCCGCTAAGATTTGTTATTTGCAAAAATAATTTGTATT	
318	PF3D7_0609100 (2) TGD rv	acgcgtATGTctataaaaaataaatcacatac	
319	PF3D7_0716900 (3) TGD fw	GCGGCCGCTAAAAAATGAAATTATTTTTGTACGACATTC	
320	PF3D7_0716900 (3) TGD rv	acgcgtGGCAATACCAAAGTAATTAATAAAATTCC	
323	PF3D7_1440800 (5) TGD fw	GCGGCCGCTAAACAATGTTAAGGATGATGAAAATAATTTT	
324	PF3D7_1440800 (5) TGD rv	acgcgtTGTATTAACAACAATAAAATACAGAACT	
	Pf3D7_0715900 SLI-Tdg F	GGTGC GGCCGCGTGGATAAGATGTCGCGTTTG	
	Pf3D7_0715900 SLI-Tgd R	GGTACGCGTGTGCCTACATTTTTATCATCTTCCTC	
	PF3D7_1135300 – fw NotI TGD	CTCGgcgccgctaaAAAAGTATGATCTCTGGAATATCCAG	cloning 1135300 loxp
	PF3D7_1135300 – rv MluI TGD	TCCTacgcgtATTTATAAAGAGATCTGTTTTATTATC	
	PF3D7_1135300 fw NotI loxP:	CTCGGCCGCGCCCGGTAATCTCTGGAATATCCAGCAAATTTG	
	PF3D7_1135300 rv SpeI loxP:	TCCTACTAGTATTTATAAAGAGATCTGTTTTATTATC	
	PF3D7_1135300 fw AvrII loxP:	CTCGCCTAGGATGAAGTCAATGATAAGCGGTATTAG	integration check PCR
	PF3D7_1135300 rv XmaI loxP:	TCCTCCCGGGCTTGCTTCTTAGGTGCGTACTTTTTTAC	
294	PF3D7_0609100 int_fw	GGTAGTAACAACCTTTGGTTGTTTTATTCC	
295	PF3D7_0609100 int_rv	tatgtggaaggttaataatggacaaggg	
296	PF3D7_0716900 int_fw	GAAATTATTTTTGTACGACATTCATACTA	
298	PF3D7_1440800 int_fw	GCACAGAACATTTAAGAAGCAATGATTTTA	
299	PF3D7_1440800 int_rv	caacttgactagccaaaatgtggtctgg	
300	PF3D7_1135300 int_fw	GATCTCTGGAATATCCAGCAAATTTGTTG	
302	PF3D7_0716900 int_rv	atatttatttttgaaccgataagctag	
305	PF3D7_1135300 int_rv	gccatatattatacatattaaataaagac	
308	PF3D7_0523800 int_fw	GGCCAAAGGAAGTTGGCTAACGGGGTGGTAG	
309	PF3D7_0523800 int_rv	gtgtcattcattacctttgaatgg	
369	TGD (PF3D7_0609100) int check fw	atatatgttttaagctcaaatg	
370	TGD (PF3D7_0609100) int check rv	gaggagaagcaaaaacgaaagtaac	
392	TGD (Pf3D7_0715900) int check fw	CCCACCGAAATGAACTCTTCGTTGC	
393	TGD (Pf3D7_0715900) int check rv	CTTTACCTTTAGAGGAGGAATTATTAG	
394	SLI TGD it fw Adelaide	gtggaattgtgagcggataac	cloning complementation constrcuts
327	Pf3D7_1135300 compl	ctcgagATGAAGTCAATGATAAGCGG	
328	Pf3D7_1135300 compl	cctaggGCTTGTCTTAGGTGCGTACT	
553	PKNH_0933400 fw 553	GGGctcgagATGAAGGGAACGTACGTAG	

554	PKNH_0933400 rv 554	GGGcctaggCACCGCCTTCGAGGCGTAC	
555	PVP01_0936100 fw 555	GGGctcgagATGAAGGGAACGTACGTCG	
556	PVP01_0936100 rv 556	GGGcctaggCACCGCCTTCGAGGCGTAC	
p37	Pf3D7_1135300 fw 5' (TKo)	GATTTTGATATATGATTATAGGATAG	excision PCR primer
	Neo 40 rv	CGAATAGCCTCTCCACCCAAG	
	Pf3D7_1135300 fw NotI	CTCGgcgccgctaaTTATTATAAATCATATAATAAAATAAATG	cloning 1135300-2xFKBP-GFP
	Pf3D7_1135300 rv AvrII	TCCTcctaggAGAAGTTTTTGGGGCATATTTCTTTG	
443	Pf3D7_0715900 (11) KpnI	GggtaccAGTATCCCCTTTCAATGTGGAAC	cloning 0715900-3xHA
	GFP 633 fw	GCCCTTTCGAAAGATCCC	confirmatory PCR
	glmS rv	GATTTCTCTTTGTTCAAGGAGTCACC	

B

pSLI- <i>Pf</i> FVRT1-GFP-glmS	this study
pSLI- <i>Pf</i> ZIP1-GFP-glmS	this study
pSLI- <i>Pf</i> CDF-GFP-glmS	this study
pSLI- <i>Pf</i> DMT2-GFP-glmS	this study
pSLI- <i>Pf</i> MFS6-GFP-glmS	this study
pSLI- <i>Pf</i> PMRT1-GFP-glmS	this study
pSLI- <i>Pf</i> FVRT1-GFP-TGD	this study
pSLI- <i>Pf</i> ZIP1-GFP-TGD	this study
pSLI- <i>Pf</i> CDF-GFP-TGD	this study
pSLI- <i>Pf</i> DMT2-GFP-TGD	this study
pSLI- <i>Pf</i> MFS6-GFP-TGD	this study
pSLI- <i>Pf</i> PMRT1-GFP-TGD	this study
pSLI- <i>Pf</i> CDF-3xHA	this study
pSLI- <i>Pf</i> PMRT1-2xFKBP-GFP	this study
P40PX-mCherry	Jonscher et al. 2018 (44)
pLyn-FRB-mCherry	Birnbaum et al. 2017 (41)
pACP-mCherry	Birnbaum et al. 2020 (46)
pARL- <i>ama1</i> ARO-mCherry	Cabrera et al. 2012 (49)
pARL- <i>ama1</i> AMA1-mCherry	Wichers et al. 2021 (51)
pSLI- <i>Pf</i> PMRT1-loxP	this study
pARL- <i>nmd3</i> <i>Pf</i> PMRT1-ty1	this study
pARL- <i>sf3a2</i> <i>Pf</i> PMRT1-ty1	this study
pHcamGDV1-GFP-DD-yDHODH	this study
pSkip-Flox	Birnbaum et al. 2017 (41)
pARL- <i>nmd3</i> <i>Pv</i> PMRT1-ty1	this study
pARL- <i>nmd3</i> <i>Pk</i> PMRT1-ty1	this study