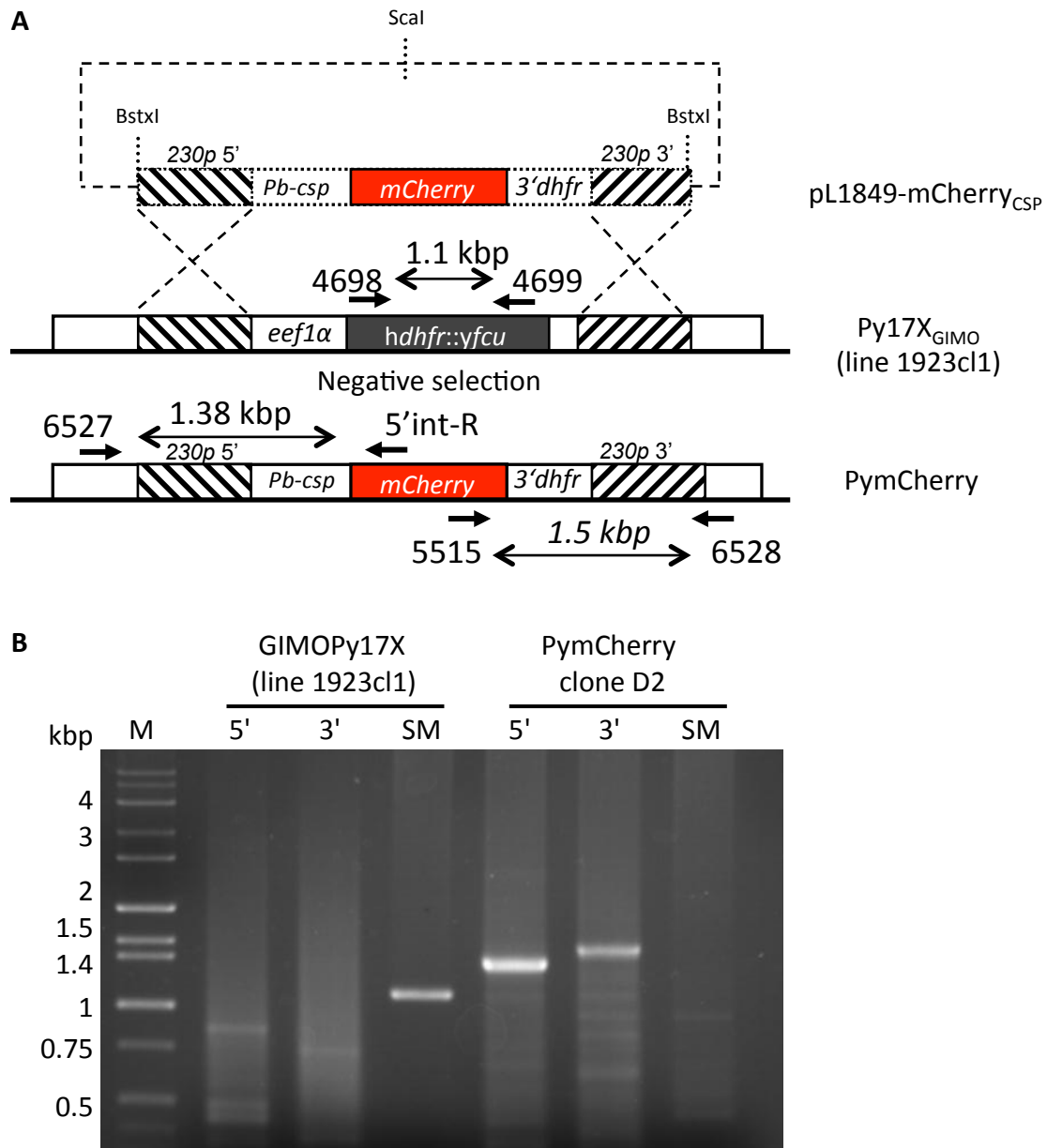


Appendix

Appendix Figure S1. Generation and verification of a *Plasmodium yoelii* line expressing mCherry under control of the *P. berghei csp* promoter

Appendix Table S1. Primers used for genotypic analysis of the Py-mCherry line



Appendix Figure S1. Generation and verification of a *Plasmodium yoelii* line expressing mCherry under control of the *P. berghei csp* promoter. (A) Schematic representation of the introduction of an mCherry-expression cassette under the control of the *P. berghei csp*-promoter into the Py17X_{GIMO} (line 1923cl1) (34). Transfection construct pL1849-mCherry_{CSP} containing the *pbcsp*-mCherry-3'*pbdhfr* cassette was linearized by digestion with BstXI and ScaI and was integrated into the modified *P. yoelii* 230p locus containing the *hdhfr::yfcu* selectable marker cassette (grey box) by double cross-over homologous recombination at the target regions (hatched boxes). Negative selection with 5-FC selected for parasites that have the mCherry reporter introduced into the genome and the *hdhfr::yfcu* marker removed (PymCherry line). Location of primers used for PCR analysis and sizes of PCR products are shown. **(B)** Following transfection and cloning, diagnostic PCRs confirmed integration as expected in the PymCherry line (clone D2), shown by the absence of the *hdhfr::yfcu* marker (amplification of *hdhfr::yfcu* with primers 4698/4699) and correct 5'- and 3'-integration PCR product sizes (primer pairs 6527/5'int-R and 5515/6528, respectively). See Appendix Table S1 for all primer sequences.

Appendix Table S1. Primers used for genotypic analysis of the Py-mCherry line.

Generation of Py-mCherry	
Primer Name	Primer Sequence
pL0047-PbCS-mCherry-F	GCACGCCCCGGGGCCCTTGCGCCCTTAAGACA
pL0047-PbCS-mCherry-R	CGTGCCCCGGGCGAGCTCGGTACCCGAAATTGAA
6527 5'- intgr <i>py230p</i> , F	GAAGGATATGAATTAGATCCACC
5'-int-R	ATTGTAAAATTGAGGATGCTTGT
5515 mCherry-F	GCATGGACGAGCTGTACAAG
6528 3'- intgr <i>py230p</i> , R	AGACATTGGCATATGAGCAAG
4698 <i>hdhfr</i> , F	GTTTCGCTAAACTGCATCGTC
4699 <i>yfcu</i> , R	GTTTGAGGTAGCAAGTAGACG