

Supplementary Table 1. Primers used in the amplification of *Plasmodium yoelii* MSP1 and CSP gene segments for the generation of recombinant proteins

Protein ^a	Oligo name	Sequence (5'→3') ^b	Amplified base positions	Recombinant protein
rPyMSP1-1	PyMSP1Nt1-F	CCGGATCC ¹ ACAATTGAAGTTATAATG	61 - 1065	
	PyMSP1Nt1-R	<u>GCGCGGCCGC</u> ² GTTAAGTTGGAACGGGTTGC		
rPyMSP1-2	PyMSP1Nt2-F	CCGGATCC ¹ CTTACATTAGAAGAAAAACAG	1066 - 2103	
	PyMSP1Nt2-R	<u>GGGCGGCCGC</u> ² GTTATTTCTTCGATACTTC		
rPyMSP1-3	PyMSP1Mt1-F	CAGGATCC ¹ ATTGCTAAAGAGAAG	2104 - 2490	
	PyMSP1Mt1-R	<u>GCGCGGCCGC</u> ² GTTATGATGCTCTGTTGAG		
rPyMSP1-4	PyMSP1Mt2-F	CAGGATCC ¹ TCACTCAGCACCTGGCGAAGG	2941 - 3678	Yes
	PyMSP1Mt2-R	<u>GGGCGGCCGC</u> ² GTTAAGAAGTAAAATTTAG		
rPyMSP1-5	PyMSP1Ct1-F	CGGGATCC ¹ ATGGAAGCTGTTCTTTAAAAAC	3679 - 4344	Yes
	PyMSP1Ct1-R	<u>GCGCGGCCGC</u> ² GTTATAATCCATTGTATG		
rPyMSP1-6	PyMSP1Ct2-F	CGGGATCC ¹ AATAATAAAATCACAAAAAAG	4345 - 5331	
	PyMSP1Ct2-R	<u>GGGCGGCCGC</u> ² GTTAAAATATATTAAATAC		
rPyMSP1-7	PyMSP1Ct2-C19-F	CGGGATCC ¹ ATGGAAGCTGTTCTTTAAAAAC	4345 - 5223	
	PyMSP1Ct2-C19-R	<u>GCGCGGCCGC</u> ² GTTATTACATGTACATATAATT		
rPyMSP1-8	PyMSP1C19-F	CCGGATCC ¹ CCGAACCAACCCCTAATGC	5224 - 5331	Yes
	PyMSP1C19-R	<u>GGGCGGCCGC</u> ² GTTAAAATATATTAAATAC		
rPyCSP-1	PyCSPNterm-F	CGGGATCC ¹ AATAAAAGTGTCCAAGCCC	73 - 684	Yes
	PyCSPNterm-R	<u>GCGCGGCCGC</u> ² GTTATGGTGCTCTGGTCCTTG		
rPyCSP-2	PyCSPCterm-F	CGGGATCC ¹ CCACAAGAACCAACCCCCAAC	862 - 1284	Yes
	PyCSPCterm-R	<u>GCCTCGAG</u> ³ GTTAATTAAAGATACTAATAC		

^aAmplified gene segments were cloned into pET-28a plasmid except for Clone 8, which was inserted into pGEX-6p-1.

^bUnderlined sequences are recognition sites for *Bam*H I (1), *Not* I (2) and *Xba*I (3), respectively.