Table S1 PCR primers used.

	Forward primers (5' --->3')		Reverse primers (5' --->3')
Degenerate primers			
For hypothetical protein genes conserved regions			
Fb	CAAYRCCTTYGAAARRICWGAADTRGATTC	Rc	CCRYTRTTTATRTYTTCHRCRTCRTC
For Group II-Group IV SERA gene conserved cysteine protease domains			
FC	CAHACDGYWGTTKTDTTTAA	RA	TAYAYRYTRCARAAAADRCART
FE	AAHATMGAAGTRGAAGARCAAGG	RB	CTTDGTTAARCARTADCCDGG
FF	TAYTGTGAYAGRTGGMAAGATAAAAC	RC	TTAAAHAMAACWRCHGTDTG
FG	TGYAAYDANGANTAYTGYRAYMG	RD	CARTARTAHCCCCARCTRTTTC
FJ	ATNARRTGYATGARRGGNYA	RH	ATRTARTTNCCRTANCCNAYDATRTT
		RI	CNRCNGTRTGDATRAARTTRT
For Group I SERA genes conserved regions			
F1	GGAAAYTTYAARDTNGAYATGTATGGWCC	R1	TYACATKCCACARTADAYRCAYTTATARTT
F2	CAYTGYAADATATGYCRYAYA	R2	GADGCRAARRCCCARCARTTYCC
For hesB gene conserved regions			
FI	GTAGAAGCWGGDGGWTGYTCAGG	RII	CAYTTRGADAKRTTYTGWATATTYTC
FIa	GTWGAAGCWGGRGGDTGYTCAGG		
FII	ARYGAHGCWATVAAYAAAATGAAASAAATAAAT		
specific primers			
P. malariae			
PmaSERA1-5F	GGAAGTCTTTGCAACGTTCTACTTTATTT	PmaSERA1-3R	GGAATGAAGTAAAAAATGTTCTTAATGCTTTTACG
PmaSERA2-5F	CAGACCTTTTCTTCATATCAATGTTTTAATTTCCCTTAGGTA	PmaSERA2-3R	GGTTTTATACAAAACAGAAAAAGCAGTCATCTGTTTTCCTC
PmaSERA3-5F	CACCTCATTTTAGCTTTTACATTCAACAAAATGATGTATCCT	PmaSERA3-3R	CTGTTTCCGTTATGCGTAACTGCTATCTATGTTATATGC
PmaSERA4-5F	GATTTCTGCGACACTATATATTAATTCTGTACAACAAAAT	PmaSERA4-3R	CCCAATGTTATTTATTCTTCCAAACAGATAATCGCTTCT
PmaSERA5-5F	GAACGTAGTAATATGTGCTAATGATACAGTTACCTCCGTT	PmaSERA5-3R	GCTACTGCTGTTTCATAACGATAAAAAAATGCCGAGGAG
PmaSERA6-5F	GCAACAAGATGAAGTATGGTATTCTGTACATTTTTATG	PmaSERA6-3R	GTAAAATATTTCACACGAAACAGAAAAGGCATTTGTTCG
PmaSERA7-5F	CAGTTTACGATGTGTATGGTTCCATTAAATATATGAGCACA	PmaSERA7-3R	CTAAAAACAGGAAAGTAGCGTAGTATTATATTGTCCCTTTT
PmaG3-5F	CGTATAACCATTAATCTAACACGATGATACGACTTGTAT	PmaG3-3R	GGATTTCTCTTCTTAAAAGAGGAAAAATCAATGCATTTAA
PmaG2-5F	CACAGAACAATAATAATGTACAGGTTAAATACGTC	PmaG2-3R	CAATGACTGAAGCGATAAAGATCTCCTAC
PmaG1-5F	GATATCACGCATGATTTCTACACATTTGTCTA	PmaG1-3R	GAGGCCAAATTGGAACCACATTACATG
PmaHP1-F	GTTGGTATATGTGTATTTTTCCGTGTGAAAGGGAA	PmaG4-R	CATACGYTAAGCACCTTCTTTCCGTTAAGGTCAT
PmaSERA1-F	GCATGAAGTTATGCACAAAGGATCTGTAATTGCTTAT	PmaSERA2-R	GCCGAACTGCTCGCATGTTCATAACCCTT
PmaSERA2-F	CGTTGGAAAACCACGAACTAGCGAATCATGTAGAAA	PmaSERA3-R	GATGTGACAAGTAGTTGTGTTCGTCCTGGACT
PmaSERA3-F	GCCTTTGACAAATGTCAATAAGAAGAAAGAAGCCGAA	PmaSERA4-R	CATAGGCAATCACAGACCCTTTATGCATAATTTCATGCTT
PmaSERA4-F	GCTAAAGGATATACCGCCTATGAGAGTGACAAA	PmaSERA5-R	CACAGTTAGCTACGTATAAAGCCGAAATGCTTCCATGTT
PmaSERA5-F	GTAATGGGTTATGATCTTAACGGAAAGAAGGTGCTTA	PmaSERA6-R	CCCTTCATACATCTAATAGTTTCGAGATGTAATTTAGAT
PmaSERA6-F	CGGAAAGAAGGTGCTTAGCGTATGTGGTGATAA	PmaSERA7-R	GCGTCCATGTTTCCCTTAAATTTATCACTCTCATA
PmaSERA7-F	GCAGCCGATGATAATACGAACGAAGTTGAACTAACAGAAT	PmaSERA7'-R	CGTCAGACATTCAGAGCATCCTCTCCCTGTGTTCCTAA
PmaSERA7'-F	CAACAGTTTGAGCGCAGAAAAGGCTAATGATTTGAAGAAT	PmaG3-R	CAGTACATCTATGTTTAGGTTTCCTCTTAGAACAGTT
PmaG3-F	GGGGACAGAGTACCAGATCATGCAGCAAATAT	PmaG2-R	CTACTAGAACAGTTTGCAACAAACAATGCAGAACTTCTA
PmaG2-F	GCATCTAAGTTACATGTAGAGACTATTAGATGTAT	PmaG1-R	GTTGATGCTAAATCGTTAGGTAAGGGATTATCTA
PmaG1-F	GTAGAAGCTGGGGGTTGTTCAGGATTTCAGTA	PmaHP2-R	CAACAGCATGTTTATCTATAATTACAACACATTCCTTA
P. ovale			
PovSERA1-5F	GGATGAAGTCTCATGTTTCCATCATTGTAACACTAT	PovSERA1-3R	GTGTCAAGCATATGCACTTCATCCTTATTTAAAGT
PovSERA2-5F	GTGTAACGCAATGAAGTCACTTATTCCCTTCTT	PovSERA2-3R	GCATAAAGTCAATTTTAGTAGCAACGCTTTACACATA
PovSERA3-5F	CCTCTCTTCTTGGTGCTGTGTAAGGCCA	PovSERA3-3R	GCTTGCTGAATGCGCAATATTTTCCCTTACCTT
PovSERA4-5F	CTAAACTTACTCAGTGTTCACTAGTTGTATCCAAATGAAGA	PovSERA4-3R	CATAATCCGTTATATGCCGAAAGAGGAATATGCATA
PovG3-5F	CAAACATAGCACCTTTACCGACTGGTCGA	PovG3-3R	GAATTGGAATCCGTTTGTGCGTTCTTATACGTA
PovG2-5F	GTGCACAGAATGACACTTAAAATCTTCATAAAGAACTGT	PovG2-3R	GAGATGAGGATCATACGATGGACACTTTTTATA
PovG1-5F	CAAAATGAAGAAGGCTACTTATTTGATGCTACTCCTA	PovG1-3R	GGACAGTAATAACTCCCAGTTACATGCCGCA
PovHP1-F	CTTGAACATCGGATGAGCATCATTTTAACG	PovSERA1-R	CTTAGTCCCTACCGAATTAGGTGTAGGTACAT
PovSERA1-F	GTACAGTAGATCTGGAAACAGTAGCAAATG	PovSERA2-R	GTGTGATATTGCAGTTCCTTGTCCATTT
PovSERA2-F	GGGTTCTGTTATTGCTTACGTAAATGCAGAAAA	PovSERA3-R	CAGTTCTCACCCCAGCTGTTTCTAACAAT
PovSERA3-F	GGTAAAGAGCGAAATCAAGAATAAAGGTTC	PovSERA4-R	CTTAGTCCCTACCGAATTAGGTGTAGGTAC
PovSERA4-F	GGTAAAGAGCGAAATCAAGAATAAAGGTTC	PovG3-R	CATTTATCCTTAGGTTTAGGACACTCATTT
PovG3-F	CTGCTTTATATGTTGCGAACTGTTCAAAGAGAAAA	PovG2-R	GGATTAGAACCAACATTACATATATCTTCATGTTTTCTT

PovG2-F	CGCATTATTTATTGCAAATTGTTCGAAAAGAAAACATGAA	PovG1-R	GGTAACGGCTTATCAATTCGTTCTCCATGCATT
PovG1-F	GGGTTAGGATTCTCTGAACCCTCAGTTAA	PovHP2-R	CAGAAGCCTGTTTATCGATTATCACAACACATTCT

P. cynomolgi

PcySERA1-5F	GCCAAAATAGCATGAATCATATGGTCTCTG	PcySERA1-3R	GAACTACTTCTACGTGTATGCTCATTTATCC
PcySERA2-5F	CTACACAACAAAATGAAGTTGACCCTTC	SimG4-R1	CRWARCAGAARWARCARTCGTTTTTTYTTC
PcySERA3-5F	CCAAGGATAATCCTTCGGCTTTTTTACC	PcySERA3-3R	CCTCTTTTAGTGACAACATGTTACACGAA
PcySERA4-5F	CTCCCTTTTACACACTTAAGAGTGGAAAA	PcySERA4-3R	GAAGTTGCACATACATACGTACCTACTG
PcySERA5-5F	GAAAGTTACACACGTACTCCAAGAGTATG	SimG4-R2	CACRAARCAGAAGAAGCADTCGTTGYTTCC
PcySERA6-5F	GAAGAGTAGAATGATTCATATCGTTTTCGT	PcySERA6-3R	CTTTTCATTGTACCGGTGAGAAGTAGCCA
SimG4-F4	GATGARGTCTAGTBTTYTYTTGTTGCTCGC	PcySERA8-3R	ATAAAAATGTGCCATTTTGATGACACAAAG
PcySERA9-5F	GATTGCAACAGAAGTAGTCAAGCCAGATT	PcySERA9-3R	CTATGCCTGACTCGTTTTACCCATTTC
PcyG3-5F	GGTTTAAAACAAATCCTACACCACACCTG	PcyG3-3R	CAAGTATCCTTTCGAAGGAACGCTAATTAA
PcyG2-5F	GTATGTGAAGTCTCAACGAATCTAGCTTGA	PcyG2-3R	CATAGGCACATCAGCCGAAAATTAACAT
PcyG1-5F	GCTTTACCTGTTTATCACTCCTGTCTACA	PcyG1-3R	CCTTATTACATGCCACAGTAAACACACTTATAG
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PcySERA1-R	GGTCTTTTATCACCACACAGGCTATGT
PcySERA1-F	CAAATGTGAAACTGTTAGAACCCTCAGATG	PcySERA2-R	GACAGACGTTATTCACCTCTTTGTAAGAGTA
PcySERA2-F	GTTCTGTCATGACGAATGGAATAACTGC	SimG4-R2	CACRAARCAGAAGAAGCADTCGTTGYTTCC
PcySERA3-F	GGATCCGTTATCGCGTATGTGAAGGC	PcySERA4-R	GACAGACGTTATTCACCGCTTTGTAAGAGTAT
PcySERA4-F	GGATCCGCAATCGCGTATGTGAAGGC	PcySERA5-R	GGCAGACGTTATTCACCGCTTTGTAAGAGTAT
PcySERA5-F	CTTTCTCCACAGATGTCGATAAACAAGC	SimG4-R3	CCTTCACTCGTTYGCRTCYTTCAGTAG
SimG4-F3	CTACTGAARGAYGCRAACGGAGTGAAGG	PcySERA7-R	CTCGGGGAAAGAAGTGAAACGTTTTTAAT
PcySERA7-F	GGGTCCGTTATCGCCTACGTGAAGGC	PcySERA8-R	GACAGACGTTATTCACCTCTTTGTAAGAGTAT
PcySERA8-F	GGATCCGTTATCGCTTATGTGAAGGC	PcyG3-R	CTCATGAGATGGCCATACAATTTATGAAAGA
PcyG3-F	GGGTATGGAAACTATATCAATAGGAAAGGA	PcyG2-R	TAAAGCAGAGCTTCGAAAGTGACCATAT
PcyG2-F	GAGGATATGGTCACTTTCGAAGCTCT	PcyG1-R	ACTTCTCCTCGCATTGGATACACTTT
PcyG1-F	CTATGCTTCGTATACACTATGCTGCACATA	PcyHP2-R	AAAAGGAATACTGGAATCCTGAGCACC

P. fieldi

PfiSERA1-5F	GAAGTCGCAGGAAATTTAGTTCATTCAGG	PfiSERA1-3R	GTGTATGCTAATTTATCCCTGTGCGAATC
PfiSERA2-5F	GAGATCGTAGAATAGCTACTTTTAATTCCA	SimG4-R1	CRWARCAGAARWARCARTCGTTTTTTYTTC
PfiSERA3-5F	CAAGATGAAGTTTCGCATTAGTGCCCTT	PfiSERA3-3R	GACGTAACATACACGTAGGTTCGTTTG
PfiSERA4-5F	GAATGATTCATATCATTTTCGTTGTCCCGC	PfiSERA4-3R	CTCTCATATGTAGCAGAAAAAGCAGTCGT
SimG4-F4	GATGARGTCTAGTBTTYTYTTGTTGCTCGC	PfiSERA5-3R	GTTTAACTTTCATGAAAAATGCTTCACGTGG
PfiSERA6-5F	CAACAGAAATAGTCAAGCCAGATTTGCAA	PfiSERA6-3R	GACTCGTTTTACCCATTTCGAGCTTTACA
PfiG3-5F	GTAGCAATAGTAAACTAATTCGTAGGAAGCAG	PfiG3-3R	GTTCACAATTTGGAGCTGCGTTTCTG
PfiG2-5F	GTTTCATACAAGTCAAACCAAGTGTGTAACT	PfiG2-3R	CATCAGCCGAAAATTAACATCAAAATGGAG
PfiG1-5F	GCGAAAGGACAAGTCCGATCATTACA	PfiG1-3R	CTTATTACATGCCACAGTAAACGCACTTATA
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PfiSERA1-R	CTGCCTCTATGTTTGAGAAGCAACTAT
PfiSERA1-F	CGTTTTCAAAGATATGCACTTCCCTGGG	PfiSERA2-R	CTTCACCTCCACACAGAGAGAGAACA
PfiSERA2-F	CGAGTGTATACAGTTCTGTTATGACGAATG	SimG4-R2	CACRAARCAGAAGAAGCADTCGTTGYTTCC
PfiSERA3-F	CAGGAGCACTCAGTTACGACTTCAAC	PfiSERA4-R	CTGCGTGGTTAGGTGTCTCGCTACTG
PfiSERA4-F	GTTGGTAAAATCAGAAGTGATGAGCAAAGG	PfiSERA5-R	GAAGTGAGGCATTTTTAATTTCAAAAATGG
PfiSERA5-F	GTTATGGTAACTACATAAACGGGGAGGG	PfiSERA6-R	AAGTCGTAAGTGAGTGCTCCTGCCGCC
PfiSERA6-F	GAGTGACCACTTCAATGGCAACATGGA	PfiG3-R	GTCCATACAATTTATTAGACAGTAACTTGC
PfiG3-F	AACATTCAGAGTGGACATGCATGGA	PfiG2-R	CTCTACCTCAATGTTTGAAATACAACTC
PfiG2-F	GTGCACAGCATGTGTGGACATAATGA	PfiG1-R	TTGCATAACACTGCACCGTTACAAT
PfiG1-F	GACCTGTGCAAGCATTATACATCCATTG	PfiHP2-R	GTTTTATCCATTAGGGAAAAGGAATACTGG

P. simiovale

PsoSERA1-5F	CCAAAATAGCATGCATCATATGGTCTCTG	PsoSERA1-3R	CATATGTGTAGAAGTACTTCTACGTGTATG
PsoSERA2-5F	GCCCTTCCGTTCTTTTTCATACTAAGTAA	SimG4-R1	CRWARCAGAARWARCARTCGTTTTTTYTTC
PsoSERA3-5F	GTATGAGGCAAGATGAAGTTTCGCATCT	PsoSERA3-3R	CATCACATTCTTTTACACAAAGCAGAAGAAG
PsoSERA4-5F	CATACTGCAAAATGAGGTCTTGCATGT	PsoSERA4-3R	CGCTGTTGTACTTGTCTCTTCAAAAATGC
SimG4-F4	GATGARGTCTAGTBTTYTYTTGTTGCTCGC	PsoSERA5-3R	CACGTAGCATTGAAGAAAAGGCTCATAAA
PsoSERA6-5F	GAAATAGTCAAGCCAGATTTGCAACCCA	PsoiSERA6-3R	CTGACTCGTTTTACCCATTTCGAGCTTTA
PsoG3-5F	CAAATACTACACCACACCTGAGCAACTT	PsoG3-3R	GATTCACAATTTGGAGTTTGGAGCTGC
PsoG2-5F	CTCAACGAATCTAGCTTAAAGGCAGTACG	PsoG2-3R	CTCTACACGCTGCAAAAAATGCAGTTA
PsoG1-5F	CGAAAGGACAAGTCCGATCATTACACAA	PsoG1-3R	GTCGAGCAAAATTATCATTTTGTGGCATTT
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PsoSERA1-R	GGATTCGATCCAGAAGTGCATCTACTTT
PsoSERA1-F	CTTACGTCAAAGCGCTAGGCGTCTTG	PsoSERA2-R	TTGACATTTGTCCTTCGCTTCTTTACT

PsoSERA2-F	GTCATGATGAATGGAATAACTGCAAAGGAG	SimG4-R2	CACRAARCAGAAGAAGCADTCGTTGYTTCC
PsoSERA3-F	CGGACATAGATAAGCTAGATGACTGTGTT	SimG4-R3	CCTTCACTCGTTYGCRTCYTTCAGTAG
SimG4-F3	CTACTGAARGAYGCRAACGGAGTGAAGG	PsoSERA5-R	CTGACCAGTTGTGCATATCACTACATTG
PsoSERA5-F	GAAGAAGGTGCTCTCTCTGTGTGGAGG	PsoSERA6-R	GCCATTGAAGTGGTCACTCTGGTAG
PsoSERA6-F	GTTACGACCTGAACGGGAAGAAGGT	PsoG3-R	CGTATCCAATTACATCCTTCGTTTTGATG
PsoG3-F	GGTATGGTAACTACATCAATACGGAGG	PsoG2-R	CAAAGCGGAGCTTCGGAAGTGA
PsoG2-F	TGGCTACGGAAATTACATCAGTGTTAAT	PsoG1-R	CCATTCATTTGGAGCACTAGAGGAAAG
PsoG1-F	GACCTGTGCAAGCATTATACATCCATTG	PsoHP2-R	CAACGGATACCTTCAATGCTTTTGAGTT

P. inui

PinSERA1-5F	GAAGTCGCAGGAAATTTAGTTCATTCGGA	PinSERA1-3R	CAAATACTTCAACGTGTAGGCTCATTTATCC
PinSERA2-5F	GCTACTTTTAATTCTACACAACAAAATGCA	SimG4-R1	CRWARCAGAARWARCARTCGTTTTTTYTTC
PinSERA3-5F	GTGTAACAAAATGAAGTCTCGTTTGTGT	PinSERA3-3R	CATTAAGCGACGTAACATACACGTAGGT
PinSERA4-5F	GATGAAGTCTAGTCTTTTTTTGTTGCTCGC	PinSERA4-3R	CAAAGGTGATCACTCCTTATGCATACAAGA
PinG3-5F	GTTTAAAACAAATACTACACCACACGTGAG	PinG3-3R	GTTAACAATTTGGAGCTGCGTTTCTTCA
PinG2-5F	CATGCATTTCTGTGTATGTGAAGTCTCAA	PinG2-3R	CGGAAAATTAACATCAAAATGGAGCGAC
PinG1-5F	CTCGCCAGTTAACACAAAAGATCATCAC	PinG1-3R	GGAGAATATGCCTCCCTTATTCCATGC
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PinSERA1-R	CAAATTTTCCCACAGATTCTGCCAATGAT
PinSERA1-F	CAAAGGATCCGTTATGGCTTATGTCAAAGC	PinSERA2-R	CGTCTTTATTGGAACAATTAGCCACGTA
PinSERA2-F	GAATGGAATAACTGCAAAGGAGAGTTCTC	SimG4-R2	CACRAARCAGAAGAAGCADTCGTTGYTTCC
PinSERAX-F	GTGTGCATACTTCTGCCAACATTTCCTC	PinSERA3-R	CATTAAGCGACGTAACATACACGTAGGT
SimG4-F2	GGAARCAACGAMTGCTTCTTCTGYTTYGTG	PinSERA4-R	CGTCTTTATTGGAACAATTAGCCACGTA
PhySERA4-F	GCTGTCAACATAATAGGCTATGGTAACTACAT	PinG3-R	GTTAAAATCGTATCCAATTACGTCCTTCG
PinG3-F	AAGTCTTCTGTGAGGAAAACT	PinG2-R	TATAAAAGGATCGGTCTTCCTTCTTTG
PinG2-F	AATTCTGCCTCAAGAACTGGAACTCCTG	PinG1-R	ATTGCATAACACAGCACCGTTACAATT
PinG1-F	GATCCAGCAGAGTGGACAAAGGATA		

P. hylobati

PhySERA1-5F	GAAGTCGCAGGAAATTTAGTTCATTCGGA	PhySERA1-3R	GAATTACTTCTACGTGTATGCTCATTTATCCC
PhySERA2-5F	CCTTCAGGTAGCTAACTTGAAAGGATAAG	PhySERA2-3R	GGTGGCCCACATTACAATATTTTACACG
PhySERA3-5F	GTTACAGTCACTTTTGCCTAATATCGTGTA	PhySERA3-3R	GGGATATAACATACACGTAGGTATGCTTTC
PhySERA4-5F	GGGAAGTGTTAATACAGATTTGACTTAACCG	PhySERA4-3R	CATCACATGCATGTTGATTAAGCAAC
PhyG3-5F	CAAATACTACACAACACATGAGCAACTAGG	PhyG3-3R	GGAACGCTAATTGAACATATGCATATGTTTAC
PhyG2-5F	GCCTGAACACACAGATGTTATGTTTCATAA	PhyG2-3R	GCCACATGAGCCTGAAATTAACATCAAAAT
PhyG1-5F	GCAGTTAGCACAAAGAATCATCACCTCAT	PhyG1-3R	CTTATTCCATGCCACAGTAAACGCATTTAT
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PhySERA1-R	GGCCTCATCTGAGGGTTCTAAGAGT
PhySERA1-F	CTTAGAACCCTCAGATGAGGCCAATTC	PhySERA2-R	GAAGGTCCGATTCCGATGGCAAAAATT
PhySERA2-F	GACGAACATGCAGTCCACCAGTTTTATT	SimG4-R2	CACRAARCAGAAGAAGCADTCGTTGYTTCC
PhySERA3-F	CAAATTGGTAAAGTCAGAAGTGATGAACA	PhySERA4-R	GTCTTCTCTAGGATGTCCAAAAATTCCAAC
PhySERA4-F	CAAATTGGTCAAATCCGAAGTGATGAACA	PhyG3-R	CGACTGTACAGATCTCTTTTTTGTTCCTTT
PhyG3-F	GGGTGAAGAGATCCTACTGGATTATTA	PhyG2-R	TTGTTCCTCTACCTCAATGTTTGAAATG
PhyG2-F	TGCACCCATTTCTGCCTCAAGAACT	PhyG1-R	TAAATCGTTAGGAAGCGGTTTGGTAATTAT
PhyG1-F	GTCCTCTGTAGGAACAACTGCCATAA	PhyHP2-R	GAGGAACTCTCTATCATAAACGACTAACTC

P. coatneyi

PcoSERA1-5F	GAAGTCGCAGGAAATTTAGTTCATTCGA	PcoSERA1-3R	CTCACACGTAGCAGAAAAAGCAATCGC
PcoSERA2-5F	GTCGTAGAATAGGTACCTTTAGTTCTACAC	PcoSERA2-3R	GTGGCCTAAATTACAATATTTTACACGTAG
PcoSERA3-5F	CCATCACCCGTATATGACATGATGAAGG	PcoSERA3-3R	CACACGTATGTTTCTTTGCCCGATTTAA
PcoSERA4-5F	GATGAAGTATAGTTTCCTCTTATTGCTCGC	PcoSERA4-3R	GCATTAACATTTGCACACTCTCATGCAT
PcoTSERA2-5F	GACAAAATGAAGGCTCACCTTTCCTTAAT	PcoTSERA2-3R	CTCGTTTTATCCATTCCGACATTTACACATAA
PcoG3-5F	CTATACCACACCTAAGCAACTTGGCAG	PcoG3-3R	GTTTACAATTTGGAGCTGAGTTTCTGCG
PcoG2-5F	CAACGAATCTAGTTTGAAGGCAGTACGA	PcoG2-3R	GTTCCTTTTGAACCTCTCTAGACGCTG
PcoG1-5F	GCGAAAGGACAAGTCTGATCACTACAT	PcoG1-3R	CTGATTATTTGCCACGTCGAGCAGAA
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PcoSERA1-R	CTCTATGTGTGAGAAGCAACTATTTTTATC
PcoSERA1-F	CCACGCAGTGAACATAATCGGCTAC	PcoSERA2-R	GCAAAAAGCCATGACGTGGCACAGTC
PcoSERA2-F	GTACAAACTAACGGTTACGATGGTGTTATC	PcoSERA3-R	GCGTTTCTTCACTTCCACATAGAGACAGT
SimG4-F2	GGAARCAACGAMTGCTTCTTCTGYTTYGTG	PcoSERA4-R	GTGTTACTTGTACTTGTGTATCCGAAACTG
PcoSERA4-F	GGAGTGAAAAAATCCTATTGGTTGTTGCA	SimG4-R5	CATTTCGAGCTYTAYACATAGCAGAAGRAAC
SimG4-F5	GHTATGYGAAGCYAACTGGAGCAAATGTGAA	PcoG3-R	CAGTTTGCAACGTACAATGCTGAGCTAC
PcoG3-F	GGTACACAACATGTGTGGTGATAAAGTA	PcoG2-R	CTTTCTTCTGGATCTCTCTTAGAGCAATTC
PcoG2-F	TGGTTACTGCTTAACTAAGATGTACACGG	PcoG1-R	GCATAACACTGCACCGTTACAAT
PcoG1-F	CCTGTGCAAACATTATACGTCCATT	PcoHP2-R	CTACAGATACCTTCAAGGCTTTTGAG

P. knowlesi

PknSERA1-5F	GGAAATTTAGTTCATTCGATGAGACGCCA	PknSERA1-3R	GCCCATATTACAATGTTTTACACGTAGCAG
PknSERA2-5F	GCGCTAAGCATAATTTCTCTGCTTTTTCT	PknSERA2-3R	CATAGGTTTGTGTGCTCAATTTAGCAAGGA
PknSERA3-5F	CTTAATGCAGATTTAACTGAACCGAAGCAA	PknSERA3-3R	CATCAACACATGTATGTGCATCGAGAAAC
PknTSERA2-5F	CCCACCTCTTGATAGGACTAGGACAAAA	PknTSERA2-3R	GTGACTCTTTTTACCCATTTCGAGCTTTA
PknG3-5F	GACATCTGAGGAATTGTCAATCGAGCAA	PknG3-3R	CACATTTTGGAGCCAAGTTCCTGCTTAT
PknG2-5F	CAACGAATCTAGTTTGAAGGCAATACGAC	PknG2-3R	CTGGAGATAACCCAAATCATTGTGGTTAC
PknG1-5F	CATTACCTGTTCTTCACTCCTGTCTACG	PknG1-3R	CTATTCCTCAACCGTCTTGCCACGAATA
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PknSERA1-5R	CCAGGTGAAAGAGATCCTGGGATTCAT
PknSERA1-3F	GATTGCTTCTTCTGCTACGTGTAAAACATT	PknSERA2-5R	CATTGTTACCTATTAGCAGAAGGGCACAG
PknSERA2-3F	GAAACAACGAATGCTTCTTCTGCTTTGT	PknSERA3-5R	GCGAGCAACAAAAGAAAACTAGACTTCATC
PknSERA3-3F	CGAATGACTGTAATTTTTGTTTCGTGTGAA	PknTSERA2-5R	GTATTAAGGAAAGGCGAGCCTTCATTTTG
PknTSERA2-3F	CAGTGCCAGGATTCTGTTTATACCAATA	PknG3-5R	CTAAAATAAGAATAAGGGCCACGGGTCG
PknG3-3F	GAAGAATGCAAACTGTTCTGTGAGGAAAAC	PknG2-5R	CTTAAAAGGACGGAAAAGCGAGAAACC
PknG2-3F	AAATAACTGCATTTTCTGCAGCGTGTAG	PknG1-5R	GAACACCACGTACTGTGCTATCTGATTTA
PknG1-3F	GACCTGTGCAAACATTATACATCCATTGG	PknHP2-R	GTTTGATATCAAACGAGTTGCCACAGG

P. fragile

PfrSERA1-5F	CATATCCTTTTCATCGTCTCGCATCCTG	PfrSERA1-3R	CACTCGGTCTCCACAAAAACTGTATCAT
SimG4-F3	GATGARGTCTAGTBTTYTYTTGTTGCTCGC	PfrSERA2-3R	CATTCGCAGATGCATCAGAACGTGTATG
PfrTSERA2-5F	GAAATAGTCAAGCCAGATTTGCAATCCA	PfrTSERA2-3R	GACTCGTTTTACCCATTTCGAGCTTTTTA
PfrG3-5F	GGTTTAAAACAAATAACTACACACCACACCTG	PfrG3-3R	CCTCAGACATAGCAGAAGTAGCAGTTG
PfrG2-5F	GCATCCATTTCTGTGTATGTAAAGTGTCAAC	PfrG2-3R	GACTAAAATTAACATCAACATGGAGCGACG
PfrG1-5F	GCTTTACCCACTCTTCACTCCTGTCTA	PfrG1-3R	CAACAGGTACAACTTAGGGAGAATCTGTTT
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PfrSERA1-R	CATTTGTCATGCGCTTTATTATTCAAACAGTTG
PfrSERA1-F	GAGGAGGGAATGAAAAAGTCCTACTGGTTGTTA	PfrSERA2-R	GAGTATCTCCCCATCAGATATAGCTCC
PfrSERA2-F	CTTCAACGGTAACATGGACGCGTTTAT	PfrG3-R	GTACATCATAAAATGGCCATACAATTTGTGAG
PfrG3-F	CCAACTGCTCCAAAAGGAACCGAAA	PfrG2-R	GATCTGCATCAAGTTTTCCACATATTAAG
PfrG2-F	TTAACGAAGATGTACACGGGCACTA	PfrG1-R	CCTGATAAGAAGCAATTCCGTATGGC
PfrG1-F	GGGTATCTGAAATGACTGCTACGATATGGG	PfrHP2-R	AAAGGAATACTGGAAGCCTGAGCAT

P. gonderi

PgoSERA1-5F	CAATCGTAGAACAGTTTGTTTTAATTGTACACC	PgoSERA1-3R	GCAATATCTAACCACGCCCTTTAACTATATG
PgoSERA2-5F	GCAAGATGAAGTCTCATCTGTTGTTTCTCT	PgoSERA2-3R	CTTGCAAATTGAAAATAATTGCTCAAAGCG
PgoSERA3-5F	GAAGCTTCGAACTTACGTCCTTCTCATAAC	PgoSERA3-3R	CTGTTTTACACAAAGCAGAAGAAGCAGTC
PgoSERA4-5F	GTGTGAATAGTACGAGTCCTTAGAACATTT	PgoSERA4-3R	CGCACCTCTCAAATCATAAATTAGCTTTCA
PgoSERA5-5F	GCAACAAGATGAAGTATAGTATTCTCTTCCTT	PgoSERA5-3R	CATAAAAGGGTTCACATATTCTTGCATGCA
PgoSERA6-5F	GATAATAAGACGAAATGAAAACCCGTATTTCC	PgoSERA6-3R	GGAAAAGAAAATAGCTTACGCATTTCACAC
PgoG3-5F	CCAGTTTTGATGAAAATGATAATACGTCCC	PgoG3-3R	CCAGATCCTTTTAGTGAAAATCCTGAGC
PgoG2-5F	GAAACCAATAGGACAAAATGATTCGTCGT	PgoG2-3R	CACGTCCTACACATTACAGAAAAAGCAG
PgoG1-5F	GCTTCCTCAACTTAGTCTAAAATGAAAGCA	PgoG1-3R	CATTATGAATGAGGTGAAACCATCACCC
SimHP1-F	CATATTTAAGMGAATCMRCTTCTGATTTT	PgoSERA1-R	CAGACATCGCCAACCAGGTTGTACGAATA
PgoSERA1-F	GAATATTTGAACATTCTTGATGGCGAGAAG	PgoSERA2-R	CAGTTAGCCACATATAAAGCAGAACTAGGAAC
PgoSERA2-F	GTAGGTAGTCATCAATCTCCATCCTTTGCT	SimG4-R2	CACRAARCAGAAGAAGCADTCGTTGYTTCC
PgoSERA3-F	CCCGGGTATTGTTTAGCTAAGAAGAAGG	PgoSERA4-R	CGAGTTCTTCTTCGAACCAGTTTCGAAG
PgoSERA5-F	GTGAATATAATCGGCTATGGAAACTATA	PgoSERA6-R	CATTTGGTTAGTCTTTACATATGCGATGACTG
PgoSERA6-F	CTTACCATCTGCATCTGACATGCCATATTC	PgoG3-R	GAATTCTATAGGATTTGATCCCACTGTACATATATC
PgoG3-F	TAGATATGCACGGACCCAAGAATTGTAAAT	PgoG2-R	AACAGAGACCACAATCTCCTTGTTCT
PgoG2-F	TATGGGCCAAAAAAATGTGAACAC	PgoG1-R	GCATTACATAATACTGCACCATTACAA
PgoG1-F	GAACGATTTATTGACAAGTGCCAGTATT	PgoHP2-R	GCAGCCTGCTTGTCAATTATTACAATAC

* The location of each primers in the *Plasmodium* SERA gene family shown in Figure S5