Supplementary table 1. *P. falciparum* proteasome specific probes used for molecular inversion probe (MIP) capture.

Subunit	Capture start[a]	Capture end[a]	Capture size	Probe sequence
β2	1184250	1184441	243	AGTAAAAATATATGGTGTGCAGGTGCNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNAAATATACTCA AAGAAGAAAACGGA
β2	1184347	1184562	268	ATCCACAGATTGTTGTTCCTGTTTTTCNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNTCTTGAGTTAA TCTTGATACACACA
β2	1184552	1184734	238	GGCAGTATTAGAAGCAAAATATAGAGACA NNNNAGATCGGAAGAGCACACGTGACTCG CCAAGCTGAAGNNNNNNNNNNCATCGTTT AAATACAAATACACAACC
β2	1184644	1184794	200	CATCTACTCCACCTAATACTATTGCACNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNACCTGCACATA TAGCTTCACAT
β2	1184786	1184946	214	CAAAAGGAACCACACCTATTTTATCTGNN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNGACAATATG ACAATAGAAGAAGGAAA
β2	1184859	1185003	200	ACATATATCTACATTACCACCAGAACCTN NNNAGATCGGAAGAGCACACGTGACTCGC CAAGCTGAAGNNNNNNNNNNTAGTTATAA CTTATGCATCTTCTACAG
PF3D7_0808300	421700	421861	221	AGAGGTAAAAGAAAAACATAAATTTGTAT GCNNNNAGATCGGAAGAGCACACGTGACT CGCCAAGCTGAAGNNNNNNNNNNCAGTGT TATGAAACTAATAATACATGAC
PF3D7_0808300	421852	422051	250	GGTATAATGGGCCACTCGTTCATTATNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNGGCAATTTGG ATTTGAAAAGATTC

PF3D7_0808300	422033	422184	200	GCAGGGATATTACCAAAAGAATTTGCNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNAGCGGACTAGAGGTACAAAATT
PF3D7_0808300	422139	422285	202	CGAAATTCACCATCATCTACTATAAAACCNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNCACCTTGACCTTTATATAATTCTTGT
PF3D7_0808300	422258	422456	260	TACGCAAAAATTTAATTATGATCATACAGTTGNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNGAATGTAGCTATAAAAGATAAGAGTAATC
PF3D7_0808300	422337	422549	270	CTTGAGATAGTACCACCTAATTTAACACCNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNTTCATTTCTGTTAATTAATTTAAGAGGG
PF3D7_0808300	422549	422734	246	TTTGAAATATGTGGTGCAGTTATATAATATGTNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNCCAGTTAATTTTTCGTTATCATATGATT
α-type-6	387234	387385	202	ACATTTTCATTACAATCATCAAGGGTACNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNAAACAAAATGGTAAGGCCTTCA
α-type-6	387255	387407	205	GTGTCTATCATACATACTCTGTGAAGGNNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNATGATCACAATTGTTATTTGTACCC
α-type-6	387414	387625	266	GTACCCTTGATGATTGTAATGAAAATGTNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNGAGCATCCTATTTCATCTGTTATATT
α-type-6	387540	387729	240	CACAATTTTCTCCCTTTACTCCTACGNNNNAGATCGGAAGAGCACACGTGACTCGCCAAGCTGAAGNNNNNNNNNNGTTTCGGCATTTACATTATATCCG

α-type-6	387589	387791	254	CACAACATGCCTATATGAGACTACACNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNTGGCTACACA ATATATTTCTCAAGA
α-type-6	387775	387943	221	TCACAAATATTTCTACATAACGTTTCGGNN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNATATGACCC GTTCAGGTAATTTTT
α-type-6	387904	388069	212	TGGTTTTTGTGCGGGATATCGTNNNNAGAT CGGAAGAGCACACGTGACTCGCCAAGCTG AAGNNNNNNNNNGCATAAATGTGTGAA ATGTGCTAT
α-type-6	388033	388222	238	CATCTATGCCAATAATCATTCCACCTNNNN AGATCGGAAGAGCACACGTGACTCGCCAA GCTGAAGNNNNNNNNNNTGCGAGAATTGT TTGTAAAGCT
α-type-6	388104	388261	207	CGAAATAGAAGTTGCAATCGTATCAACNN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNGGGATATCG TGCTTGTGTTATT
α-type-6	388145	388339	250	AATCTTTCTAAAACACTTATGCTCTCTTGN NNNAGATCGGAAGAGCACACGTGACTCGC CAAGCTGAAGNNNNNNNNNNCTTAATCCC TCTCAGCTATATATGTT
β5	441150	441319	233	TGTTATGTGAATAAAAATTTATGTAACATT CATATNNNNAGATCGGAAGAGCACACGTG ACTCGCCAAGCTGAAGNNNNNNNNNNTGA TTATAATTTAAATCTAGACCAAGCT
β5	441249	441426	236	AATCATCAACATAAAACATATTAAATCCG GNNNNAGATCGGAAGAGCACACGTGACTC GCCAAGCTGAAGNNNNNNNNNNGTCATAT CCATTTTTGTGAATATGAAAA
β5	441380	441557	239	ACATATGCTTATTCTATTTTAGATTCAGCA NNNNAGATCGGAAGAGCACACGTGACTCG CCAAGCTGAAGNNNNNNNNNNTAAAGATT TATGAATTAAGAAATAACGAAAA
β5	441483	441659	240	TTATTTATTTCAATAATCTTTTCAACATTCT GTGANNNNAGATCGGAAGAGCACACGTG

				ACTCGCCAAGCTGAAGNNNNNNNNNGGT ATGATCATAACCACTTAAAATAATA
β5	441627	441796	230	TGATTGCTTATATTGGGAAAAATATTTAGG TANNNNAGATCGGAAGAGCACACGTGACT CGCCAAGCTGAAGNNNNNNNNNNAAAAT ATGCACAAACTCAAAATAAGAAA
β5	441714	441899	248	TCATTTATTAAATTATCAATTTCATTCATA AAGCTNNNNAGATCGGAAGAGCACACGTG ACTCGCCAAGCTGAAGNNNNNNNNNNTTC TGTGAAGATATAAAAGATCCCATA
β5	441854	442024	230	GCTCCAGTGAATGTACCAAGAAATNNNNA GATCGGAAGAGCACACGTGACTCGCCAAG CTGAAGNNNNNNNNNNATCATTTCTAATT TTAATTTTTATATTATCTCAAG
19S PfRPT4	297238	297324	137	AGCACCATTAAATCCATCACACAATCNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNTTTTCCTTCAC TTATTTTTCTGGC
19S PfRPT4	297346	297492	195	TAATACATCTGGTCGATTAGTAGCCANNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNCAGCACCATTA AATCCATCACA
19S PfRPT4	297487	297576	143	GCTTTAGTTAGACCAGGAAGATTAGATAG NNNNAGATCGGAAGAGCACACGTGACTCG CCAAGCTGAAGNNNNNNNNNNGATAGAG AAATACAGAGAACGCTT
19S PfRPT4	297560	297666	160	TGGTTGATGTTCCTTTGCATAATTAAACNN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNACCTAATTCT TCAAATCCATCTAGG
19S PfRPT4	297635	297737	154	AGGAGGTAGAAGATTTTCTCAAGGTACNN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNTGAGAATTGT TGTATCAGCTATTG
19S PfRPT4	297717	297820	157	GGAGGACCATATAATAAAACACCTTTAGG NNNNAGATCGGAAGAGCACACGTGACTCG

				CCAAGCTGAAGNNNNNNNNNACATCTCT CTAATAATACGTGCAC
19S PfRPT4	297811	297896	136	AAAACATTATTAGCAAGAGCAATGGCNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNGACAGATGAG AGAAGTAGTAGAGT
19S PfRPT4	297866	298022	208	CTTCACATGGTAATCTTTTCATAACCGNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNCCTTTAGGTGT TTTTATTCCAACT
19S PfRPT4	297954	298137	235	ATAATCAAATAGGTGGGTTAAGTGAGCNN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNTTTATTGTGA AAGCTTCTAGTGGT
19S PfRPT4	298084	298288	258	ACTTTACTCTCAATTTCTCTGTGTTCANNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNGTCATATCTAA TGATACTCTTGTACC
19S PfRPT4	298195	298346	206	GGACAAGTATTAAAACAGCTAGAAGATGN NNNAGATCGGAAGAGCACACGTGACTCGC CAAGCTGAAGNNNNNNNNNNCTAATTAGT TACGATGGATAACAAGG
19S PfRPT4	298330	298417	138	ATGTATGTATGTGTGTGTGCTAAACANNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNTCTGTGTTCAA TAACTTTCTTCAC
19S PfRPT4	298366	298467	152	GTTACGATGGATAACAAGGAAAGCANNNN AGATCGGAAGAGCACACGTGACTCGCCAA GCTGAAGNNNNNNNNNNCCGTTTAATATA TTTGCTTGACATG
RPN10	399641	399803	215	TTTTTGATAAAAAGGAGGGAGACAGCNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNAAGAAGAAAA TATGGAAGATACTTCC
RPN10	399715	399930	267	TCATTCACAAGAGCAAAATTGTCATCTNN NNAGATCGGAAGAGCACACGTGACTCGCC

				AAGCTGAAGNNNNNNNNNNTCTTGTATTA ATGAAGATGCCGAT
RPN10	399740	399935	244	TAAACCAAGGTGAAGAAAAGGAGCANNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNAAGATGACAA TTTTGCTCTTGTG
RPN10	400015	400226	264	AGACAATATTAATGCCTCCTTTAACTCANN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNTTACCACACG TGTTACCATTATTA
RPN10	400232	400379	204	CATATGCTGACTTTCTTCCAAAGATAATTG NNNNAGATCGGAAGAGCACACGTGACTCG CCAAGCTGAAGNNNNNNNNNNCTTTTCTG TATATTCCCTTAAAGACA
RPN10	400307	400505	253	CTCATATTCTGGACATTCAATAAATCTACA NNNNAGATCGGAAGAGCACACGTGACTCG CCAAGCTGAAGNNNNNNNNNNCTTCAATG GTGGGTAAGTCATTAT
RPN10	400450	400642	247	AGGAAATATTCAAGATGATGATCAGCTAC NNNNAGATCGGAAGAGCACACGTGACTCG CCAAGCTGAAGNNNNNNNNNNAAGCAAT TAATAAATACTGGGAAGC
RPN10	400668	400848	231	TTCACTTTTATTTTATCCCCGGCCANNNNA GATCGGAAGAGCACACGTGACTCGCCAAG CTGAAGNNNNNNNNNNGCTTCCCAGTATT TATTAATTGCTT
RPN10	400771	400923	201	AAGAAGTTTGTTAATAGCCCAGCTAGNNN NAGATCGGAAGAGCACACGTGACTCGCCA AGCTGAAGNNNNNNNNNNTCGATTGTGTG AATGTTCTGTG
RPN10	400922	401095	227	TTTCATCAAAACATATTGTACTCGTGAGNN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNTTGTAGTGTA AGCTCGTTTTATTAC
RPN10	400962	401136	226	GTTTCCCTTTTGTAGATCGATTGTGTNNNN AGATCGGAAGAGCACACGTGACTCGCCAA

				GCTGAAGNNNNNNNNNNACAATGGCGCA TAAATATAGAAAAA
RPN10	401125	401270	200	CTGTGATAAAAATCTGTTAGGGACTATATC NNNNAGATCGGAAGAGCACACGTGACTCG CCAAGCTGAAGNNNNNNNNNNTCAAAAC ATATTGTACTCGTGAGA
RPN10	400450	400642	234	CCACAATGGCGCATAAATATAGAAAAANN NNAGATCGGAAGAGCACACGTGACTCGCC AAGCTGAAGNNNNNNNNNNAGAAAGAAA AATGAGCAATATCGAA

[a] Gene location in the *P. falciparum* 3D7 reference strain.