

Supplementary information

All oligonucleotides were purchased from biomers (Ulm, Germany) or MWG (Ebersberg, Germany). Each one was 50 nucleotides in length, containing a C6-aminolinker and a 20-25mer oligo-dT spacer at the 5'-end.

Oligonucleotides for the HIV protease array

position		name	sequence 5'-3'	length	1. array	2. array
10	28	PR_AS10_f1(20)_28_C	TCACTCTTTGGCAGCGACCC	20	x	
		PR_AS10_f1(30)_28_C	CCTCAGATCACTCTTTGGCAGCGACCC	27	x	x
		PR_AS10_f1_29_T	CACTCTTTGGCAGCGACCC	20	x	x
	29	PR_AS10_f2(28)_29_T	CCTCARATCACTCTTTGGCARGACCCC	28	x	x
		PR_AS10_f3(28)_29_T	CCTCARATCACTCTTTGGCARGACCCA	28	x	x
		PR_AS10_f4(28)_29_T	CCTCARATCACTCTTTGGCARGACCCA	28	x	x
		PR_AS10_f5(28)_29_T	CCTCARATCACTCTTTGGCARGACCCA	28	x	x
	30	PR_AS10_f1_30_C	ACTCTTTGGCAGCGACCCCT	20	x	x
		PR_AS10_f2(29)_30_C	CCTCARATCACTCTTTGGCARGACCCCT	29	x	x
		PR_AS10_f3(29)_30_C	CCTCARATCACTCTTTGGCARGACCCAT	29	x	x
		PR_AS10_f4(29)_30_C	CCTCARATCACTCTTTGGCARGACCCCT	29	x	x
		PR_AS10_f5(29)_30_C	CCTCARATCACTCTTTGGCARGACCCGT	29	x	x
		PR_AS10_f6(29)_30_C	CCTCARATCACTCTTTGGCARGACCCCG	29	x	x
		PR_AS10_f7(29)_30_C	CCTCARATCACTCTTTGGCARGACCCAG	29	x	x
PR_AS10_f8(29)_30_C		CCTCARATCACTCTTTGGCARGACCCCTG	29	x	x	
PR_AS10_f9(29)_30_C		CCTCARATCACTCTTTGGCARGACCCGG	29	x	x	
20	58	PR_AS20_r1(30)_58_T	CATCTGCTCCTGTATCTAATAGAGCTTCCT	30	x	x
		PR_AS20_r2(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCCT	30	x	x
		PR_AS20_r3(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCCA	30	x	x
		PR_AS20_r4(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCCC	30	x	x
		PR_AS20_r5(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCTT	30	x	x
		PR_AS20_r6(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCTA	30	x	x
		PR_AS20_r7(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCTC	30	x	x
		PR_AS20_r8(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCCG	30	x	x
		PR_AS20_r9(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCTG	30	x	x
		PR_AS20_r10(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCAT	30	x	x
		PR_AS20_r11(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCAA	30	x	x
		PR_AS20_r12(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCAC	30	x	x
		PR_AS20_r13(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCAG	30	x	x
		PR_AS20_r14(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCGT	30	x	x
	PR_AS20_r15(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCGA	30	x	x	
	PR_AS20_r16(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCGG	30	x	x	
	PR_AS20_r17(30)_58_T	CATCTGCTCCTGTTRCTAATAGAGCTTCGC	30	x	x	
59	PR_AS20_r1(20)_59_T	CTGTATCTAATAGAGCTTCC	20	x	x	
	PR_AS20_r1(30)_59_T	TCATCTGCTCCTGTATCTAATAGAGCTTCC	30	x	x	
	PR_AS20_r2(30)_59_T	TCATCTGCTCCTGTTRCTAATAGAGCTTCC	30	x	x	
	PR_AS20_r3(30)_59_T	TCATCTGCTCCTGTTRCTAATAGAGCTTCT	30	x	x	
	PR_AS20_r4(30)_59_T	TCATCTGCTCCTGTTRCTAATAGAGCTTCA	30	x	x	
PR_AS20_r5(30)_59_T	TCATCTGCTCCTGTTRCTAATAGAGCTTCG	30	x	x		
60	PR_AS20_r1(20)_60_C	CCTGTATCTAATAGAGCTTC	20	x	x	
	PR_AS20_r1(30)_60_C	ATCATCTGCTCCTGTATCTAATAGAGCTTC	30	x	x	
	PR_AS20_r2(30)_60_C	ATCATCTGCTCCTGTTRCTAATAGAGCTTC	30	x	x	
23	67	PR_AS23_r1_67_G	ATACTGTATCATCTGCTCCTGTATCTAATA	30	x	
		PR_AS23_r2_67_G	ATACTGTATCATCTGCTCCTGTGTCTAATA	30	x	x
		PR_AS23_f1_67_C	ATAAAGATAGGGGGGCARITAAAGGAAGCT	30		x
		PR_AS23_f2_67_C	ATAAAGATAGGGGGGCARITAAAGGAAGCT	30		x
		PR_AS23_f3_67_C	ATAAAGATAGGGGGGCARITAAAGGAAGCT	30		x
		PR_AS23_f4_67_C	ATAAAGATAGGGGGGCARITAAAGGAAGCT	30		x
		PR_AS23_f5_67_C	ATAAAGATAGGGGGGCARITAAAGGAAGCT	30		x
PR_AS23_f6_67_C	ATAAAGATAGGGGGGCARITAAAGGAAGCT	30		x		

68	PR_AS23_r1_68_A	AATACTGTATCATCTGCTCCTGTATCTAAT	30	x	x	
	PR_AS23_r2_68_A	AATACTGTATCATCTGCTCCTGTGTCTAAT	30	x	x	
69	PR_AS23_r1_69_T	TAATACTGTATCATCTGCTCCTGTATCTAA	30	x	x	
	PR_AS23_r2_69_T	TAATACTGTATCATCTGCTCCTGTGTCTAA	30	x	x	
24	70	PR_AS24_r_70_A	ATCATCTGCTCCTGTATCTA	20	x	x
		PR_AS24_r2(29)_70_A	CTAATACTGTATCATCTGCTCTGTATCTA	29	x	x
		PR_AS24_r3(29)_70_A	CTAATACTGTATCATCTGCTCTGTGTCTA	29	x	x
	71	PR_AS24_r_71_A	TATCATCTGCTCCTGTATCT	20	x	x
		PR_AS24_r2(30)_71_A	TCTAATACTGTATCATCTGCTCCTGTATCT	30	x	x
		PR_AS24_r3(30)_71_A	TCTAATACTGTATCATCTGCTCCTGTGTCT	30	x	x
	72	PR_AS24_r_72_T	GTATCATCTGCTCCTGTATC	20	x	x
		PR_AS24_r2_72_T	GTATCATCTGCTCCTGTGTC	20	x	x
		PR_AS24_r2(30)_72_T	TTCTAATACTGTATCATCTGCTCCTGTATC	30	x	x
		PR_AS24_r3(30)_72_T	TTCTAATACTGTATCATCTGCTCCTGTGTC	30	x	x
30	88	PR_AS30_f_88_G	TATTAGATACAGGAGCAGAT	20	x	x
		PR_AS30_f(30)_88_G	GAAGCTCTATTAGATACAGGAGCAGAT	27	x	x
		PR_AS30_f2(27)_88_G	GAAGCTCTATTAGAYACAGGAGCAGAT	27	x	x
		PR_AS30_r1_88_C	AAAYTCATITCTTCTAATACTGTAT	25		x
		PR_AS30_r2_88_C	AAAYTTATITCTTCTAATACTGTAT	25		x
		PR_AS30_r3_88_C	AAAYCCATITCTTCTAATACTGTAT	25		x
		PR_AS30_r4_88_C	AAAYCTATITCTTCTAATACTGTAT	25		x
	89	PR_AS30_f_89_A	ATTAGATACAGGAGCAGATG	20	x	x
		PR_AS30_f2(28)_89_A	GAAGCTCTATTAGAYACAGGAGCAGATG	28	x	x
		PR_AS30_f3(28)_89_A	GAAGCTCTATTAGAYACAGGAGCAGATA	28	x	x
	90	PR_AS30_f_90_T	TTAGATACAGGAGCAGATGA	20	x	x
		PR_AS30_f2(29)_90_T	GAAGCTCTATTAGAYACAGGAGCAGATGA	29	x	x
		PR_AS30_f3(29)_90_T	GAAGCTCTATTAGAYACAGGAGCAGATAA	29	x	x
32	94	PR_AS32_f_94_G	ATACAGGAGCAGATGATACA	20	x	x
		PR_AS32_f2(30)_94_G	GCTCTATTAGAYACAGGAGCAGATGATACA	30	x	x
	95	PR_AS32_f_95_T	TACAGGAGCAGATGATACAG	20	x	x
		PR_AS32_f2(30)_95_T	CTCTATTAGAYACAGGAGCAGATGATACAG	30	x	x
		PR_AS32_f3(30)_95_T	CTCTATTAGAYACAGGAGCAGATGATACAA	30	x	x
	96	PR_AS32_f_96_A	ACAGGAGCAGATGATACAGT	20	x	x
		PR_AS32_f2(30)_96_A	TCTATTAGAYACAGGAGCAGATGATACAGT	30	x	x
		PR_AS32_f3(30)_96_A	TCTATTAGAYACAGGAGCAGATGATACAAT	30	x	x
33	97	PR_AS33_f_97_T	CAGGAGCAGATGATACAGTA	20	x	x
		PR_AS33_f(30)_97_T	CTATTAGAYACAGGAGCAGATGATACAGTA	30	x	x
	98	PR_AS33_f_98_T	AGGAGCAGATGATACAGTAT	20	x	x
		PR_AS33_f(30)_98_T	TATTAGAYACAGGAGCAGATGATACAGTAT	30	x	x
		PR_AS33_f2(30)_98_T	TATTAGAYACAGGAGCAGATGATACAGTAG	30	x	x
		PR_AS33_f3(30)_98_T	TATTAGAYACAGGAGCAGATGATACAGTAA	30	x	x
	99	PR_AS33_f_99_A	GGAGCAGATGATACAGTATT	20	x	x
		PR_AS33_f2(30)_99_A	ATTAGAYACAGGAGCAGATGATACAGTATT	30	x	x
		PR_AS33_f3(30)_99_A	ATTAGAYACAGGAGCAGATGATACAGTAGT	30	x	x
		PR_AS33_f4(30)_99_A	ATTAGAYACAGGAGCAGATGATACAGTAAT	30	x	x
36	106	PR_AS36_f_106_A	ATGATACAGTATTAGAAGAA	20	x	x
		PR_AS36_f2(30)_106_A	ACAGGAGCAGATGATACAGTATTAGAAGAA	30	x	x
		PR_AS36_f3(30)_106_A	ACAGGAGCAGATGATACAGTATTAGAAGAT	30	x	x
		PR_AS36_f4(30)_106_A	ACAGGAGCAGATGATACAGTATTAGAAGAC	30	x	x
	107	PR_AS36_f2(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGAAA	30	x	x
		PR_AS36_f3(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGATA	30	x	x
		PR_AS36_f4(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGACA	30	x	x
		PR_AS36_f5(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGAAG	30	x	x
		PR_AS36_f6(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGATG	30	x	x
		PR_AS36_f7(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGACG	30	x	x
		PR_AS36_f8(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGAAT	30	x	x
		PR_AS36_f9(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGATT	30	x	x
		PR_AS36_f10(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGACT	30	x	x
		PR_AS36_f11(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGAAC	30	x	x
		PR_AS36_f12(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGATC	30	x	x
		PR_AS36_f13(30)_107_T	CAGGAGCAGATGATACAGTATTAGAAGACC	30	x	x
	108	PR_AS36_f_108_G	GATACAGTATTAGAAGAAAT	20	x	x
		PR_AS36_f(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAAAT	30	x	x
		PR_AS36_f2(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATAT	30	x	x
		PR_AS36_f3(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACAT	30	x	x
		PR_AS36_f4(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAAGT	30	x	x

		PR_AS36_f5(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATGT	30	x	x
		PR_AS36_f6(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACGT	30	x	
		PR_AS36_f7(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAATT	30	x	x
		PR_AS36_f8(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATTT	30	x	x
		PR_AS36_f9(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACTT	30	x	x
		PR_AS36_f10(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAACT	30	x	x
		PR_AS36_f11(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATCT	30	x	x
		PR_AS36_f12(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACCT	30	x	x
		PR_AS36_f13(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAAAC	30	x	x
		PR_AS36_f14(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATAC	30	x	x
		PR_AS36_f15(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACAC	30	x	x
		PR_AS36_f16(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAAGC	30	x	x
		PR_AS36_f17(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATGC	30	x	x
		PR_AS36_f18(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACGC	30	x	x
		PR_AS36_f19(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAATC	30	x	x
		PR_AS36_f20(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATTC	30	x	x
		PR_AS36_f21(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACTC	30	x	x
		PR_AS36_f22(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGAACC	30	x	x
		PR_AS36_f23(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGATCC	30	x	x
		PR_AS36_f24(30)_108_G	AGGAGCAGATGATACAGTATTAGAAGACCC	30	x	x
		PR_AS36_r1_108_C	ATTTTTGGTTTTCCATYTYCCTGGCAAATT	29		x
		PR_AS36_r2_108_C	ATTTTTGGTTTTCCATYTYCCTGGCAAATC	29		x
		PR_AS36_r3_108_C	ATTTTTGGTTTTCCATYTYCCTGGCAAACCT	29		x
		PR_AS36_r4_108_C	ATTTTTGGTTTTCCATYTYCCTGGCAAACC	29		x
		PR_AS36_r5_108_C	ATTTTTGGTTTTCCATYTYCCTGGTAAATT	29		x
		PR_AS36_r6_108_C	ATTTTTGGTTTTCCATYTYCCTGGTAAATC	29		x
		PR_AS36_r7_108_C	ATTTTTGGTTTTCCATYTYCCTGGTAAACT	29		x
		PR_AS36_r8_108_C	ATTTTTGGTTTTCCATYTYCCTGGTAAACC	29		x
46	136	PR_AS46_r_136_T	ACCTCCAATTCCTCCCTATCA	20	x	x
		PR_AS46_r2_136_T	ACCTCCAATTCCTCCCTATTA	20	x	x
		PR_AS46_r3_136_T	ACCTCCAATTCCTCCCTATAA	20	x	x
		PR_AS46_r4_136_T	ACCTCCAATTCCTCCCTATGA	20	x	x
	137	PR_AS46_r_137_A	AACCTCCAATTCCTCCCTATC	20	x	x
		PR_AS46_r2_137_A	AACCTCCAATTCCTCCCTATT	20	x	x
		PR_AS46_r3_137_A	AACCTCCAATTCCTCCCTATA	20	x	x
		PR_AS46_r4_137_A	AACCTCCAATTCCTCCCTATG	20	x	x
	138	PR_AS46_r_138_C	AAACCTCCAATTCCTCCCTAT	20	x	x
47	139	PR_AS47_r_139_T	AAAACCTCCAATTCCTCCCA	20	x	x
		PR_AS47_r(30)_139_T	TTACTTTTGAYAAAACCTCCAATTCCTCCCA	30	x	x
		PR_AS47_r2(30)_139_T	TTACTTTTGAYAAAACCTCCAATTCCTCCCTA	30	x	x
		PR_AS47_f1_139_A	TTTRCCAGGRAGATGGAAACCAAAAATG	28		x
		PR_AS47_f2_139_A	TTTRCCAGGRAGATGGAAACCAAAAATA	28		x
		PR_AS47_f3_139_A	TTTRCCAGGRAAATGGAAACCAAAAATG	28		x
		PR_AS47_f4_139_A	TTTRCCAGGRAAATGGAAACCAAAAATA	28		x
	140	PR_AS47_r_140_A	TAAAACCTCCAATTCCTCCCT	20	x	x
		PR_AS47_r2_140_A	CAAAACCTCCAATTCCTCCCT	20	x	x
		PR_AS47_r(29)_140_A	TTACTTTTGAYAAAACCTCCAATTCCTCCCA	29	x	x
		PR_AS47_r2(29)_140_A	TTACTTTTGAYAAAACCTCCAATTCCTCCCT	29	x	x
	141	PR_AS47_r3(28)_141_T	TTACTTTTGAYAAAACCTCCAATTCCTCCCA	28	x	x
48	142	PR_AS48_r_142_C	GATAAAACCTCCAATTCCTCC	20	x	x
		PR_AS48_r2_142_C	GACAAAACCTCCAATTCCTCC	20	x	x
		PR_AS48_r2_142_C	GTYYTTACTTTTGAYAAAACCTCCAATTCCTCA	30	x	x
	143	PR_AS48_r_143_C	TGATAAAACCTCCAATTCCTCC	20	x	x
		PR_AS48_r2(30)_143_C	TGTYTTACTTTTGAYAAAACCTCCAATTCCTCC	30	x	x
	144	PR_AS48_r_144_C	TTGATAAAACCTCCAATTCCTCC	20	x	x
		PR_AS48_r2(29)_144_C	TGTYTTACTTTTGAYAAAACCTCCAATTCCTCC	29	x	x
50	148	PR_AS50_f_148_A	AACCAAAAATGATAGGGGGA	20	x	x
		PR_AS50_f2(27)_148_A	ARATGGAAACCAAAAATGATAGGGGGA	27	x	x
		PR_AS50_f3(27)_148_A	ARATGGAAACCAAAAATAATAGGGGGA	27	x	x
	149	PR_AS50_f_149_T	ACC AAAAATGATAGGGGGA	20	x	x
		PR_AS50_f2(28)_149_T	ARATGGAAACCAAAAATRATAGGGGGAA	28	x	x
		PR_AS50_f3(28)_149_T	ARATGGAAACCAAAAATRATAGGGGGAG	28	x	x
		PR_AS50_f4(28)_149_T	ARATGGAAACCAAAAATRATAGGGGGAC	28	x	x
	150	PR_AS50_f_150_T	CCAAAATGATAGGGGGAAT	20	x	x
		PR_AS50_f2(29)_150_T	ARATGGAAACCAAAAATRATAGGGGGAAAT	29	x	x
		PR_AS50_f3(29)_150_T	ARATGGAAACCAAAAATRATAGGGGGAGT	29	x	x
		PR_AS50_f4(29)_150_T	ARATGGAAACCAAAAATRATAGGGGGACT	29	x	x

53	157	PR_AS53_f_157_T	TGATAGGGGGAATTGGAGGT	20	x	x
		PR_AS53_f2(30)_157_T	AAACCAAAAATRATAGGGGGAATTGGAGGT	30	x	x
	158	PR_AS53_f_158_T	GATAGGGGGAATTGGAGGTT	20	x	x
		PR_AS53_f2(30)_158_T	AACCAAAAATRATAGGGGGAATTGGAGGTT	30	x	x
		PR_AS53_f3(30)_158_T	AACCAAAAATRATAGGGGGAATTGGAGGTC	30	x	x
		PR_AS53_f4(30)_158_T	AACCAAAAATRATAGGGGGAATTGGAGGTA	30	x	x
	159	PR_AS53_f_159_T	ATAGGGGGAATTGGAGGTTT	20	x	x
		PR_AS53_f2(30)_159_T	ACCAAAAATRATAGGGGGAATTGGAGGTTT	30	x	x
		PR_AS53_f3(30)_159_T	ACCAAAAATRATAGGGGGAATTGGAGGTTA	30	x	x
		PR_AS53_f4(30)_159_T	ACCAAAAATRATAGGGGGAATTGGAGGTCT	30	x	x
		PR_AS53_f5(30)_159_T	ACCAAAAATRATAGGGGGAATTGGAGGTCA	30	x	x
		PR_AS53_f6(30)_159_T	ACCAAAAATRATAGGGGGAATTGGAGGTAT	30	x	x
54	160	PR_AS54_f_160_A	TAGGGGGAATTGGAGGTTTT	20	x	x
		PR_AS54_f2(30)_160_A	CCAAAAATRATAGGGGGAATTGGAGGTTTT	30	x	x
	161	PR_AS54_f_161_T	AGGGGGAATTGGAGGTTTTA	20	x	x
		PR_AS54_f2_161_T	AGGGGGAATTGGAGGTTTTG	20	x	x
		PR_AS54_f3(30)_161_T	CAAAAATRATAGGGGGAATTGGAGGTTTTTC	30	x	x
	162	PR_AS54_f_162_C	GGGGGAATTGGAGGTTTTAT	20	x	x
		PR_AS54_f2_162_C	GGGGGAATTGGAGGTTTTGT	20	x	x
		PR_AS54_f3(30)_162_C	AAAAATRATAGGGGGAATTGGAGGTTTTCT	30	x	x
		PR_AS54_f5(30)_162_C	AAAAATRATAGGGGGAATTGGAGGTTTTGA	30	x	x
		PR_AS54_f6(30)_162_C	AAAAATRATAGGGGGAATTGGAGGTTTTCA	30	x	x
60	178	PR_AS60_f_178_G	TTATCAAAGTAAAACAGTAT	20	x	x
		PR_AS60_f2(30)_178_G	ATTGGAGGTTTTTRTCAAAGTAARACAGTAT	30	x	x
		PR_AS60_f3(30)_178_G	ATTGGAGGTTTTTRTCAAAGTAARACAATAT	30	x	x
		PR_AS60_r1_178_C	CCGCAGATTTCTAYIAGTATCTGAT	25		x
		PR_AS60_r2_178_C	CCGCAGATTTCTAYIAGTATTTGAT	25		x
		PR_AS60_r3_178_C	CCGCAGATTTCTAYIAGTACCTGAT	25		x
		PR_AS60_r4_178_C	CCGCAGATTTCTAYIAGTACTTGAT	25		x
		PR_AS60_r5_178_C	CCGCAGATTTCTAYIGGTATCTGAT	25		x
		PR_AS60_r6_178_C	CCGCAGATTTCTAYIGGTATTTGAT	25		x
		PR_AS60_r7_178_C	CCGCAGATTTCTAYIGGTACCTGAT	25		x
		PR_AS60_r8_178_C	CCGCAGATTTCTAYIGGTACTTGAT	25		x
	179	PR_AS60_f_179_A	TATCAAAGTAAAACAGTATG	20	x	x
		PR_AS60_f2_179_A	TRTCAAAGTAARACAATATG	20	x	x
		PR_AS60_f3(30)_179_A	TTGGAGGTTTTTRTCAAAGTAARACAATATG	30	x	x
		PR_AS60_f4(30)_179_A	TTGGAGGTTTTTRTCAAAGTAARACAGTATG	30	x	x
	180	PR_AS60_f_180_T	ATCAAAGTAAAACAGTATGA	20	x	x
		PR_AS60_f2(30)_180_T	TGGAGGTTTTTRTCAAAGTAAGACAGTATGA	30	x	x
		PR_AS60_f3(30)_180_T	TGGAGGTTTTTRTCAAAGTAARACAGTATGA	30	x	x
		PR_AS60_f4(30)_180_T	TGGAGGTTTTTRTCAAAGTAARACAATATGA	30	x	x
62	184	PR_AS62_f1(30)_184_A	GGTTTTTRTCAAAGTAARACAGTATGATCAG	30	x	x
		PR_AS62_f2(30)_184_A	GGTTTTTRTCAAAGTAARACAGTATGATCAA	30	x	x
		PR_AS62_f3(30)_184_A	GGTTTTTRTCAAAGTAARACAATATGATCAG	30	x	x
		PR_AS62_f4(30)_184_A	GGTTTTTRTCAAAGTAARACAATATGATCAA	30	x	x
		PR_AS62_r1_184_T	C'TTTATGTCCRCARATTTCTATGAGTA	27		x
		PR_AS62_r2_184_T	C'TTTATGTCCRCARATTTCTATGAGTA	27		x
		PR_AS62_r3_184_T	C'TTTATGTCCRCARATTTCTATAAGTA	27		x
		PR_AS62_r4_184_T	C'TTTATGTCCRCARATTTCTATAAGTA	27		x
		PR_AS62_r5_184_T	C'TTTATGTCCRCARATTTCTATTAGTA	27		x
		PR_AS62_r6_184_T	C'TTTATGTCCRCARATTTCTATTAGTA	27		x
		PR_AS62_r7_184_T	C'TTTATGTCCRCARATTTCTAAGAGTA	27		x
		PR_AS62_r8_184_T	C'TTTATGTCCRCARATTTCTAAGAGTA	27		x
		PR_AS62_r9_184_T	C'TTTATGTCCRCARATTTCTAAAAGTA	27		x
		PR_AS62_r10_184_T	C'TTTATGTCCRCARATTTCTAAAAGTA	27		x
		PR_AS62_r11_184_T	C'TTTATGTCCRCARATTTCTAATAGTA	27		x
		PR_AS62_r12_184_T	C'TTTATGTCCRCARATTTCTAATAGTA	27		x
	185	PR_AS62_f1(30)_185_T	G'TTTTRTCAAAGTAARACARTATGATCAGG	30	x	x
		PR_AS62_f2(30)_185_T	G'TTTTRTCAAAGTAARACARTATGATCAAA	30	x	x
		PR_AS62_f3(30)_185_T	G'TTTTRTCAAAGTAARACARTATGATCAGA	30	x	x
		PR_AS62_f4(30)_185_T	G'TTTTRTCAAAGTAARACARTATGATCAAG	30	x	x
		PR_AS62_r1_185_T	C'TTTATGTCCRCARATTTCTATGAGT	26		x
		PR_AS62_r2_185_T	C'TTTATGTCCRCARATTTCTATGAGT	26		x
		PR_AS62_r3_185_T	C'TTTATGTCCRCARATTTCTATAAGT	26		x
		PR_AS62_r4_185_T	C'TTTATGTCCRCARATTTCTATAAGT	26		x
		PR_AS62_r5_185_T	C'TTTATGTCCRCARATTTCTATTAGT	26		x
		PR_AS62_r6_185_T	C'TTTATGTCCRCARATTTCTATTAGT	26		x

		PR_AS62_r7_185_T	CTTTATGTCCRCARATTTCTAAGAGT	26		x
		PR_AS62_r8_185_T	CTTTATGTCCRCARATTTCTAAGAGT	26		x
		PR_AS62_r9_185_T	CTTTATGTCCRCARATTTCTAAAAGT	26		x
		PR_AS62_r10_185_T	CTTTATGTCCRCARATTTCTAAAAGT	26		x
		PR_AS62_r11_185_T	CTTTATGTCCRCARATTTCTAATAGT	26		x
		PR_AS62_r12_185_T	CTTTATGTCCRCARATTTCTAATAGT	26		x
186		PR_AS62_f1(30)_186_A	TTTTRTCAAAGTAARACARTATGATCAGGT	30	x	x
		PR_AS62_f2(30)_186_A	TTTTRTCAAAGTAARACARTATGATCAAAT	30	x	x
		PR_AS62_f3(30)_186_A	TTTTRTCAAAGTAARACARTATGATCAGAT	30	x	x
		PR_AS62_f4(30)_186_A	TTTTRTCAAAGTAARACARTATGATCAAGT	30	x	x
63	187	PR_AS63_f2(26)_187_C	TCAAAGTAARACARTATGATCAGATA	26	x	x
		PR_AS63_f3(26)_187_C	TCAAAGTAARACARTATGATCAGGTA	26	x	x
		PR_AS63_f4(26)_187_C	TCAAAGTAARACARTATGATCAAGTA	26	x	x
		PR_AS63_f5(26)_187_C	TCAAAGTAARACARTATGATCAAATA	26	x	x
188		PR_AS63_f_188_T	AAGACAGTATGATCAGATAC	20	x	x
		PR_AS63_f2_188_T	AARACARTATGATCAAGTAC	20	x	x
		PR_AS63_f3_188_T	AARACARTATGATCAAATAC	20	x	x
		PR_AS63_f4_188_T	AARACARTATGATCAGGTAC	20	x	x
189		PR_AS63_f2(28)_189_C	TCAAAGTAARACARTATGATCAGATACT	28	x	
		PR_AS63_r1_189_G	AGCTTTWTKTCCGCAGATTTCTAT	24		x
		PR_AS63_r2_189_G	AGCTTTWTKTCCGCAGATTTCTAC	24		x
		PR_AS63_r3_189_G	AGCTTTWTKTCCGCAAATTTCTAT	24		x
		PR_AS63_r4_189_G	AGCTTTWTKTCCGCAAATTTCTAC	24		x
		PR_AS63_r5_189_G	AGCTTTWTKCCCGCAGATTTCTAT	24		x
		PR_AS63_r6_189_G	AGCTTTWTKCCCGCAGATTTCTAC	24		x
		PR_AS63_r7_189_G	AGCTTTWTKCCCGCAAATTTCTAT	24		x
		PR_AS63_r8_189_G	AGCTTTWTKCCCGCAAATTTCTAC	24		x
		PR_AS63_r9_189_G	AGCTTTWTKTCCACAGATTTCTAT	24		x
		PR_AS63_r10_189_G	AGCTTTWTKTCCACAGATTTCTAC	24		x
		PR_AS63_r11_189_G	AGCTTTWTKTCCACAAATTTCTAT	24		x
		PR_AS63_r12_189_G	AGCTTTWTKTCCACAAATTTCTAC	24		x
		PR_AS63_r13_189_G	AGCTTTWTKCCACAGATTTCTAT	24		x
		PR_AS63_r14_189_G	AGCTTTWTKCCACAGATTTCTAC	24		x
		PR_AS63_r15_189_G	AGCTTTWTKCCACAAATTTCTAT	24		x
		PR_AS63_r16_189_G	AGCTTTWTKCCACAAATTTCTAC	24		x
71	211	PR_AS71_r_211_C	TACTAATACTGTACCTATAG	20	x	x
		PR_AS71_r2(25)_211_C	GGTCCTAYTAAYACTGTACCTATAG	25	x	x
		PR_AS71_r3(25)_211_C	GGTCCTAYTAAYACTGTACCTACAA	25	x	x
		PR_AS71_r4(25)_211_C	GGTCCTAYTAAYACTGTACCTATAA	25	x	
		PR_AS71_r6(25)_211_C	GGTCCTAYTAAYACTGTACCTACAG	25	x	x
212		PR_AS71_r_212_G	CTACTAATACTGTACCTATA	20	x	x
		PR_AS71_r2(24)_212_G	GGTCCTAYTAAYACTGTACCTATA	24	x	x
		PR_AS71_r3(24)_212_G	GGTCCTAYTAAYACTGTACCTACA	24	x	x
213		PR_AS71_r_213_A	CCTACTAATACTGTACCTAT	20	x	x
		PR_AS71_r2(30)_213_A	AGGTGTRGGTCCTAYTAATACTGTACCTAT	30	x	x
		PR_AS71_r3(30)_213_A	AGGTGTRGGTCCTAYTAATACTGTACCTAC	30	x	x
		PR_AS71_r4(30)_213_A	AGGTGTRGGTCCTAYTAACACTGTACCTAT	30	x	x
		PR_AS71_r5(30)_213_A	AGGTGTRGGTCCTAYTAACACTGTACCTAC	30	x	x
73	217	PR_AS73_r_217_C	AGGTCCCTACTAATACTGTAC	20	x	x
		PR_AS73_r2(27)_217_C	CAGGTGTRGGTCCTAYTAATACTGTAC	27	x	x
		PR_AS73_r3(27)_217_C	CAGGTGTRGGTCCTAYTAACACTGTAC	27	x	x
		PR_AS73_r4(27)_217_C	CAGGTGTRGGTCCTAYTAATACTGTAG	27	x	x
		PR_AS73_r5(27)_217_C	CAGGTGTRGGTCCTAYTAACACTGTAG	27	x	x
218		PR_AS73_r_218_C	TAGGTCCCTACTAATACTGTA	20	x	x
		PR_AS73_r2(26)_218_C	CAGGTGTRGGTCCTAYTAATACTGTA	26	x	x
219		PR_AS73_r_219_A	GTAGGTCCCTACTAATACTGT	20	x	x
		PR_AS73_r2(30)_219_A	GTTGRCAGGTGTRGGTCCTACTAATACTGT	30	x	x
		PR_AS73_r3(30)_219_A	GTTGRCAGGTGTRGGTCCTACTAACACTGT	30	x	x
		PR_AS73_r4(30)_219_A	GTTGRCAGGTGTRGGTCCTATTAATACTGT	30	x	x
		PR_AS73_r5(30)_219_A	GTTGRCAGGTGTRGGTCCTATTAACACTGT	30	x	x
76	226	PR_AS76_r1(30)_226_A	CAATTATGTTGRCAGGTGTRGGTCCTACTA	30	x	x
		PR_AS76_r2(30)_226_A	CAATTATGTTGRCAGGTGTRGGTCCTATTA	30	x	x
227		PR_AS76_r1(30)_227_A	CCAATTATGTTGRCAGGTGTRGGTCCTACT	30	x	x
		PR_AS76_r2(30)_227_A	CCAATTATGTTGRCAGGTGTRGGTCCTATT	30	x	x
228		PR_AS76_r1(30)_228_T	TCCAATTATGTTGRCAGGTGTRGGTCCTAC	30	x	
		PR_AS76_r2(30)_228_T	TCCAATTATGTTGRCAGGTGTRGGTCCTAT	30	x	x
		PR_AS76_f3_228_A	GGACATAARGYTATAGGTACAGTATT	26		x

		PR_AS76_f4_228_A	GGACATAARGYTATAGGTACAGTAGT	26		x
		PR_AS76_f5_228_A	GGACATAARGYTATAGGTACAGTGTT	26		x
		PR_AS76_f6_228_A	GGACATAARGYTATAGGTACAGTGGT	26		x
		PR_AS76_f7_228_A	GGACATAARGYTGTAGGTACAGTATT	26		x
		PR_AS76_f8_228_A	GGACATAARGYTGTAGGTACAGTAGT	26		x
		PR_AS76_f9_228_A	GGACATAARGYTGTAGGTACAGTGTT	26		x
		PR_AS76_f10_228_A	GGACATAARGYTGTAGGTACAGTGGT	26		x
		PR_AS76_f11_228_A	GGACATAARGYTGTAGGTACAGTATT	26		x
		PR_AS76_f12_228_A	GGACATAARGYTGTAGGTACAGTAGT	26		x
		PR_AS76_f13_228_A	GGACATAARAYTATAGGTACAGTGTT	26		x
		PR_AS76_f14_228_A	GGACATAARAYTATAGGTACAGTGGT	26		x
		PR_AS76_f15_228_A	GGACATAARAYTATAGGTACAGTATT	26		x
		PR_AS76_f16_228_A	GGACATAARAYTATAGGTACAGTAGT	26		x
		PR_AS76_f17_228_A	GGACATAARAYTGTAGGTACAGTGTT	26		x
		PR_AS76_f18_228_A	GGACATAARAYTGTAGGTACAGTGGT	26		x
77	229	PR_AS77_r_229_C	GTTGACAGGTGTAGGTCCTA	20	x	x
		PR_AS77_r2_229_C	GTTGRCAGGTGTGGGTCCTA	20	x	x
	230	PR_AS77_r_230_A	TGTTGACAGGTGTAGGTCCT	20	x	x
		PR_AS77_r2_230_A	TGTTGRCAGGTGTGGGTCCT	20	x	x
	231	PR_AS77_r_231_T	ATGTTGACAGGTGTAGGTCC	20	x	x
		PR_AS77_r2_231_T	ATGTTGGCAGGTGTGGGTC	20	x	x
		PR_AS77_r3_231_T	ATGTTGACAGGTGTGGGTC	20	x	x
		PR_AS77_r4_231_T	ATGTTGGCAGGTGTAGGTCC	20	x	x
82	244	PR_AS82_f_244_G	TATTAGTAGGACCTACACCT	20	x	x
		PR_AS82_f(29)_244_G	TAGGTACAGTRTTARTAGGACCYACACCT	29	x	x
	245	PR_AS82_f_245_T	ATTAGTAGGACCTACACCTG	20	x	x
		PR_AS82_f2_245_T	RTTARTAGGACCCACACCTG	20	x	x
		PR_AS82_f2(30)_245_T	TAGGTACAGTRTTARTAGGACCYACACCTG	30	x	x
		PR_AS82_f3(30)_245_T	TAGGTACAGTRTTARTAGGACCYACACCTA	30	x	x
		PR_AS82_f4(30)_245_T	TAGGTACAGTRTTARTAGGACCYACACCTT	30	x	x
		PR_AS82_f5(30)_245_T	TAGGTACAGTRTTARTAGGACCYACACCTC	30	x	x
	246	PR_AS82_f_246_C	TTAGTAGGACCTACACCTGT	20	x	x
		PR_AS82_f2_246_C	TTARTAGGACCCACACCTGC	20	x	x
		PR_AS82_f3_246_C	TTARTAGGACCTACACCTGC	20	x	x
		PR_AS82_f4_246_C	TTARTAGGACCCACACCTGT	20	x	x
		PR_AS82_f2(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTGT	30	x	x
		PR_AS82_f3(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTAT	30	x	x
		PR_AS82_f4(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTTT	30	x	x
		PR_AS82_f5(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTCT	30	x	x
		PR_AS82_f6(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTGC	30	x	x
		PR_AS82_f7(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTAC	30	x	x
		PR_AS82_f8(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTTC	30	x	x
		PR_AS82_f9(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTCC	30	x	x
		PR_AS82_f10(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTGG	30	x	x
		PR_AS82_f11(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTAG	30	x	x
		PR_AS82_f12(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTTG	30	x	x
		PR_AS82_f13(30)_246_C	AGGTACAGTRTTARTAGGACCYACACCTCG	30	x	x
84	250	PR_AS84_f_250_A	TAGGACCTACACCTGTCAAC	20	x	x
		PR_AS84_f2_250_A	TAGGACCYACACCTGCCAAC	20	x	x
	251	PR_AS84_f_251_T	AGGACCTACACCTGTCAACA	20	x	x
		PR_AS84_f2_251_T	AGGACCYACACCTGCCAAC	20	x	x
		PR_AS84_f2(25)_251_T	TTARTAGGACCYACACCTGTCAACA	25	x	x
		PR_AS84_f3(25)_251_T	TTARTAGGACCYACACCTGTCAACG	25	x	x
		PR_AS84_f4(25)_251_T	TTARTAGGACCYACACCTGCCAAC	25	x	x
		PR_AS84_f5(25)_251_T	TTARTAGGACCYACACCTGCCAACG	25	x	x
	252	PR_AS84_f_252_A	GGACCTACACCTGTCAACAT	20	x	x
		PR_AS84_f2_252_A	GGACCYACACCTGCCAACAT	20	x	x
		PR_AS84_f2(26)_252_A	TTARTAGGACCYACACCTGTCAACAT	26	x	x
		PR_AS84_f3(26)_252_A	TTARTAGGACCYACACCTGTCAACGT	26	x	x
		PR_AS84_f4(26)_252_A	TTARTAGGACCYACACCTGCCAACAT	26	x	x
		PR_AS84_f5(26)_252_A	TTARTAGGACCYACACCTGCCAACGT	26	x	x
88	262	PR_AS88_f_262_A	CTGTCAACATAATTGGAAGA	20	x	x
		PR_AS88_f2(30)_262_A	GGACCYACACCTGYCAACATAATTGGAAGA	30	x	x
	263	PR_AS88_f_263_A	TGTCAACATAATTGGAAGAA	20	x	x
		PR_AS88_f2(30)_263_A	GACCYACACCTGYCAACATAATTGGAAGAA	30	x	x
		PR_AS88_f3(30)_263_A	GACCYACACCTGYCAACATAATTGGAAGAG	30	x	x
	264	PR_AS88_f_264_T	GTCAACATAATTGGAAGAAA	20	x	

	PR_AS88_f3(30)_264_T	ACCYACACCTGYCAACATAATTGGAAGAAA	30	x	x	
	PR_AS88_f4(30)_264_T	ACCYACACCTGYCAACATAATTGGAAGAAG	30	x	x	
	PR_AS88_f5(30)_264_T	ACCYACACCTGYCAACATAATTGGAAGAGA	30	x	x	
	PR_AS88_f6(30)_264_T	ACCYACACCTGYCAACATAATTGGAAGAGG	30	x	x	
90	268	PR_AS90_f_268_T	ACATAATTGGAAGAAATCTG	20	x	x
		PR_AS90_f(30)_268_T	ACACCTGYCAACATAATTGGAAGAAATCTG	30	x	x
		PR_AS90_f2(30)_268_T	ACACCTGYCAACATAATTGGAAGAAATATG	30	x	x
		PR_AS90_f3(30)_268_T	ACACCTGYCAACATAATTGGAAGAAATTTG	30	x	x
		PR_AS90_f4(30)_268_T	ACACCTGYCAACATAATTGGAAGAAACCTG	30	x	x
		PR_AS90_f5(30)_268_T	ACACCTGYCAACATAATTGGAAGAAACATG	30	x	x
		PR_AS90_f6(30)_268_T	ACACCTGYCAACATAATTGGAAGAAACTTG	30	x	x
		PR_AS90_r_268_A	ACTGCAGCCAATCTGAGTCA	20	x	x
	269	PR_AS90_f_269_T	CATAATTGGAAGAAATCTGT	20	x	x
		PR_AS90_f2(30)_269_T	CACCTGYCAACATAATTGGAAGAAATATGT	30	x	x
		PR_AS90_f3(30)_269_T	CACCTGYCAACATAATTGGAAGAAATTTGT	30	x	x
		PR_AS90_f4(30)_269_T	CACCTGYCAACATAATTGGAAGAAACCTGT	30	x	x
		PR_AS90_f5(30)_269_T	CACCTGYCAACATAATTGGAAGAAACATGT	30	x	x
		PR_AS90_f6(30)_269_T	CACCTGYCAACATAATTGGAAGAAACTTGT	30	x	x
		PR_AS90_f7(30)_269_T	CACCTGYCAACATAATTGGAAGAAATCTGA	30	x	x
		PR_AS90_f8(30)_269_T	CACCTGYCAACATAATTGGAAGAAATATGA	30	x	x
		PR_AS90_f9(30)_269_T	CACCTGYCAACATAATTGGAAGAAATTTGA	30	x	x
		PR_AS90_f10(30)_269_T	CACCTGYCAACATAATTGGAAGAAACCTGA	30	x	x
		PR_AS90_f11(30)_269_T	CACCTGYCAACATAATTGGAAGAAACATGA	30	x	x
		PR_AS90_f12(30)_269_T	CACCTGYCAACATAATTGGAAGAAACTTGA	30	x	x
		PR_AS90_f(30)_269_T	CACCTGYCAACATAATTGGAAGAAATCTGT	30	x	x
		PR_AS90_r_269_A	AACCTGCAGCCAATCTGAGTC	20	x	x
	270	PR_AS90_f_270_G	ATAATTGGAAGAAATCTGTT	20	x	x
		PR_AS90_f(30)_270_G	ACCTGYCAACATAATTGGAAGAAATCTGTT	30	x	x
		PR_AS90_f2(30)_270_G	ACCTGYCAACATAATTGGAAGAAATATGTT	30	x	x
		PR_AS90_f3(30)_270_G	ACCTGYCAACATAATTGGAAGAAATTTGTT	30	x	x
		PR_AS90_f4(30)_270_G	ACCTGYCAACATAATTGGAAGAAACCTGTT	30	x	x
		PR_AS90_f5(30)_270_G	ACCTGYCAACATAATTGGAAGAAACATGTT	30	x	x
		PR_AS90_f6(30)_270_G	ACCTGYCAACATAATTGGAAGAAACTTGT	30	x	x
		PR_AS90_f7(30)_270_G	ACCTGYCAACATAATTGGAAGAAATCTGAT	30	x	x
		PR_AS90_f8(30)_270_G	ACCTGYCAACATAATTGGAAGAAATATGAT	30	x	x
		PR_AS90_f9(30)_270_G	ACCTGYCAACATAATTGGAAGAAATTTGAT	30	x	x
		PR_AS90_f10(30)_270_G	ACCTGYCAACATAATTGGAAGAAACCTGAT	30	x	x
		PR_AS90_f11(30)_270_G	ACCTGYCAACATAATTGGAAGAAACATGAT	30	x	x
		PR_AS90_f12(30)_270_G	ACCTGYCAACATAATTGGAAGAAACTTGT	30	x	x
		PR_AS90_r_270_C	AACTGCAGCCAATCTGAGT	20	x	x
93	277	PR_AS93_r1_277_T	AAAATTTAAACTGCAGCCAA	20	x	x
		PR_AS93_r1_278_A	AAAATTTAAACTGCAGCCA	19	x	x
		PR_AS93_r1_279_A	AAAATTTAAACTGCAGCC	18	x	x
		PR_AS93_f1_277_A	GAAGAAATCTGTTGACTCAG	20	x	x
		PR_AS93_f(30)_277_A	AACATAATTGGAAGAAAYCTGTTGACTCAG	30	x	x
		PR_AS93_f2(30)_277_A	AACATAATTGGAAGAAAYHTGTTGACTCAG	30	x	x
		PR_AS93_f2(30)_277_A	AACATAATTGGAAGAAAYHTGTTGACTCAG	30	x	x
		PR_AS93_f3(30)_277_A	AACATAATTGGAAGAAAYHTGTTGACTCAA	30	x	x
		PR_AS93_f4(30)_277_A	AACATAATTGGAAGAAAYHTGATGACTCAG	30	x	x
		PR_AS93_f5(30)_277_A	AACATAATTGGAAGAAAYHTGATGACTCAA	30	x	x
		PR_AS93_r2_277_T	AATGGGAAAATTTARAGTGCAGCCAA	26		x
		PR_AS93_r3_277_T	AATGGGAAAATTTARAGTGAACCAA	26		x
		PR_AS93_r4_277_T	AATGGGAAAATTTARAGTACAGCCAA	26		x
		PR_AS93_r5_277_T	AATGGGAAAATTTARAGTACAACCAA	26		x
		PR_AS93_r6_277_T	AATGGGAAAATTTARGGTGCAGCCAA	26		x
		PR_AS93_r7_277_T	AATGGGAAAATTTARGGTGAACCAA	26		x
		PR_AS93_r8_277_T	AATGGGAAAATTTARGGTACAGCCAA	26		x
		PR_AS93_r9_277_T	AATGGGAAAATTTARGGTACAACCAA	26		x
	278	PR_AS93_f1_278_T	AAGAAATCTGTTGACTCAGA	20	x	x
		PR_AS93_f(30)_278_T	ACATAATTGGAAGAAAYCTGTTGACTCAGA	30	x	x
		PR_AS93_f2(30)_278_T	ACATAATTGGAAGAAAYHTGTTGACTCAGA	30	x	x
		PR_AS93_f3(30)_278_T	ACATAATTGGAAGAAAYHTGTTGACTCAA	30	x	x
		PR_AS93_f4(30)_278_T	ACATAATTGGAAGAAAYHTGATGACTCAGA	30	x	x
		PR_AS93_f5(30)_278_T	ACATAATTGGAAGAAAYHTGATGACTCAA	30	x	x
		PR_AS93_f6(30)_278_T	ACATAATTGGAAGAAAYHTGTTGACTCAGC	30	x	x
		PR_AS93_f7(30)_278_T	ACATAATTGGAAGAAAYHTGTTGACTCAAC	30	x	x
		PR_AS93_f8(30)_278_T	ACATAATTGGAAGAAAYHTGATGACTCAGC	30	x	x
		PR_AS93_f9(30)_278_T	ACATAATTGGAAGAAAYHTGATGACTCAAC	30	x	x
	279	PR_AS93_f1_279_T	AGAAATCTGTTGACTCAGAT	20	x	x

PR_AS93_f(30)_279_T	CATAATTGGAAGAAAYCTGTTGACTCAGAT	30	x	x
PR_AS93_f2(30)_279_T	CATAATTGGAAGAAAYHTGTTGACTCAGAT	30	x	x
PR_AS93_f3(30)_279_T	CATAATTGGAAGAAAYHTGTTGACTCAAAT	30	x	x
PR_AS93_f4(30)_279_T	CATAATTGGAAGAAAYHTGATGACTCAGAT	30	x	x
PR_AS93_f5(30)_279_T	CATAATTGGAAGAAAYHTGATGACTCAAAT	30	x	x
PR_AS93_f6(30)_279_T	CATAATTGGAAGAAAYHTGTTGACTCAGCT	30	x	x
PR_AS93_f7(30)_279_T	CATAATTGGAAGAAAYHTGTTGACTCAACT	30	x	x
PR_AS93_f8(30)_279_T	CATAATTGGAAGAAAYHTGATGACTCAGCT	30	x	x
PR_AS93_f9(30)_279_T	CATAATTGGAAGAAAYHTGATGACTCAACT	30	x	x

Oligonucleotides for the HIV reverse transcriptase array

position		name	sequence 5'-3'	length	
41	121	RT_AS41_f1_121_A	ATAAAAGCATTARTAGAAATYTGACAGAA	30	
	122	RT_AS41_f1_122_T	TAAAAGCATTARTAGAAATYTGACAGAAA	30	
		RT_AS41_f2_122_T	TAAAAGCATTARTAGAAATYTGACAGAAC	30	
		RT_AS41_f3_122_T	TAAAAGCATTARTAGAAATYTGACAGAAT	30	
	123	RT_AS41_f1_123_G	AAAAGCATTARTAGAAATYTGACAGAAAT	30	
		RT_AS41_f2_123_G	AAAAGCATTARTAGAAATYTGACAGAACT	30	
RT_AS41_f3_123_G		AAAAGCATTARTAGAAATYTGACAGAATT	30		
44	130	RT_AS44_r1_130_C	TTTCAGGCCCAATTTTTGAAATTTTYCCTT	30	
		RT_AS44_r2_130_C	TTTCAGGCCCAATTTTTGAAATTTTYCCAT	30	
		RT_AS44_r3_130_C	TTTCAGGCCCAATTTTTGAAATTTTYCCGT	30	
		RT_AS44_r4_130_C	TTTCAGGCCCAATTTTTGAAATTTTYCCTG	30	
		RT_AS44_r5_130_C	TTTCAGGCCCAATTTTTGAAATTTTYCCAG	30	
		RT_AS44_r6_130_C	TTTCAGGCCCAATTTTTGAAATTTTYCCGG	30	
	131	RT_AS44_r1_131_T	TTTTTCAGGCCCAATTTTTGAAATTTTTCCT	30	
		RT_AS44_r2_131_T	TTTTTCAGGCCCAATTTTTGAAATTTTCCA	30	
		RT_AS44_r3_131_T	TTTTTCAGGCCCAATTTTTGAAATTTTCCG	30	
		RT_AS44_r4_131_T	TTTTTCAGGCCCAATTTTTGAAATTTTCCCT	30	
		RT_AS44_r5_131_T	TTTTTCAGGCCCAATTTTTGAAATTTTCCCA	30	
		RT_AS44_r6_131_T	TTTTTCAGGCCCAATTTTTGAAATTTTCCCG	30	
	132	RT_AS44_r1_132_T	ATTTTCAGGCCCAATTTTTGAAATTTTCC	30	
		RT_AS44_r2_132_T	ATTTTCAGGCCCAATTTTTGAAATTTTCCC	30	
	62	184	RT_AS62_f1_184_G	CCTGAAAATCCATAYAATACTCCAGTATTT	30
		185	RT_AS62_f1_185_C	CTGAAAATCCATAYAATACTCCAGTATTTG	30
		186	RT_AS62_f1_186_C	TGAAAATCCATAYAATACTCCAGTATTTGC	30
			RT_AS62_f2_186_C	TGAAAATCCATAYAATACTCCAGTATTTGT	30
65	193	RT_AS65_f1_193_A	CCATAYAATACTCCAGTATTTGYCATAAAG	30	
		RT_AS65_f2_193_A	CCATAYAATACTCCAGTATTTGYTATAAAG	30	
	194	RT_AS65_f1_194_A	CATAYAATACTCCAGTATTTGYCATAAAGA	30	
		RT_AS65_f2_194_A	CATAYAATACTCCAGTATTTGYTATAAAGG	30	
	195	RT_AS65_f1_195_A	ATAYAATACTCCAGTATTTGYCATAAAGAA	30	
		RT_AS65_f2_195_A	ATAYAATACTCCAGTATTTGYTATAAAGAA	30	
		RT_AS65_f3_195_A	ATAYAATACTCCAGTATTTGYCATAAAGGA	30	
		RT_AS65_f4_195_A	ATAYAATACTCCAGTATTTGYTATAAAGGA	30	
		RT_AS65_f5_195_A	ATAYAATACTCCAGTATTTGYCATAAAGAG	30	
		RT_AS65_f6_195_A	ATAYAATACTCCAGTATTTGYTATAAAGAG	30	
		RT_AS65_f7_195_A	ATAYAATACTCCAGTATTTGYCATAAAGGG	30	
		RT_AS65_f8_195_A	ATAYAATACTCCAGTATTTGYTATAAAGGG	30	

67	199	RT_AS67_f1_199_G	AATACTCCAGTATTTGYYATAAAGAAAAAA	30
		RT_AS67_f1_201_C	TACTCCAGTATTTGYYATAAAGRAAAAAGA	30
		RT_AS67_r1_199_C	TAATTTTCTCCATYTAITACTGT	23
		RT_AS67_r2_199_C	TAATTTTCTCCATYTAITACTGC	23
		RT_AS67_r3_199_C	TAATTTTCTCCATYTAITACTTT	23
		RT_AS67_r4_199_C	TAATTTTCTCCATYTAITACTTC	23
		RT_AS67_r5_199_C	TAATTTTCTCCATYTAITACTCT	23
		RT_AS67_r6_199_C	TAATTTTCTCCATYTAITACTCC	23
		RT_AS67_r7_199_C	TAATTTTCTCCATYTAICTACTGT	23
		RT_AS67_r8_199_C	TAATTTTCTCCATYTAICTACTGC	23
		RT_AS67_r9_199_C	TAATTTTCTCCATYTAICTACTTT	23
		RT_AS67_r10_199_C	TAATTTTCTCCATYTAICTACTTC	23
		RT_AS67_r11_199_C	TAATTTTCTCCATYTAICTACTCT	23
		RT_AS67_r12_199_C	TAATTTTCTCCATYTAICTACTCC	23
	200	RT_AS67_f1_200_A	ATACTCCAGTATTTGYYATAAAGRAAAAAG	30
		RT_AS67_r1_200_T	TAATTTTCTCCATYTAITACTG	22
		RT_AS67_r2_200_T	TAATTTTCTCCATYTAITACTT	22
	201	RT_AS67_r1_201_G	TAHTTTTCTCCATTTAGTACT	21
		RT_AS67_r2_201_G	TAHTTTTCTCCATTTAGCACT	21
		RT_AS67_r3_201_G	TAHTTTTCTCCATTTATTACT	21
		RT_AS67_r4_201_G	TAHTTTTCTCCATTTATCACT	21
		RT_AS67_r5_201_G	TAHTTTTCTCCATTTACTACT	21
		RT_AS67_r6_201_G	TAHTTTTCTCCATTTACCACT	21
		RT_AS67_r7_201_G	TAHTTTTCTCCATTTAATACT	21
		RT_AS67_r8_201_G	TAHTTTTCTCCATTTAACACT	21
		RT_AS67_r9_201_G	TAHTTTTCTCCATCTAGTACT	21
		RT_AS67_r10_201_G	TAHTTTTCTCCATCTAGCACT	21
		RT_AS67_r11_201_G	TAHTTTTCTCCATCTATTACT	21
		RT_AS67_r12_201_G	TAHTTTTCTCCATCTATCACT	21
		RT_AS67_r13_201_G	TAHTTTTCTCCATCTACTACT	21
		RT_AS67_r14_201_G	TAHTTTTCTCCATCTACCACT	21
		RT_AS67_r15_201_G	TAHTTTTCTCCATCTAATACT	21
		RT_AS67_r16_201_G	TAHTTTTCTCCATCTAACACT	21
69	205	RT_AS69_r1_205_T	ATCYAYTAITTTTCTCCATTTAG	23
		RT_AS69_r2_205_T	ATCYAYTAITTTTCTCCATTTAT	23
		RT_AS69_r3_205_T	ATCYAYTAITTTTCTCCATTTAC	23
		RT_AS69_r4_205_T	ATCYAYTAITTTTCTCCATTTAA	23
		RT_AS69_r5_205_T	ATCYAYTAITTTTCTCCATCTAG	23
		RT_AS69_r6_205_T	ATCYAYTAITTTTCTCCATCTAT	23
		RT_AS69_r7_205_T	ATCYAYTAITTTTCTCCATCTAC	23
		RT_AS69_r8_205_T	ATCYAYTAITTTTCTCCATCTAA	23
		RT_AS69_r9_205_T	ATCYGYTAITTTTCTCCATTTAG	23
		RT_AS69_r10_205_T	ATCYGYTAITTTTCTCCATTTAT	23
		RT_AS69_r11_205_T	ATCYGYTAITTTTCTCCATTTAC	23
		RT_AS69_r12_205_T	ATCYGYTAITTTTCTCCATTTAA	23
		RT_AS69_r13_205_T	ATCYGYTAITTTTCTCCATCTAG	23
		RT_AS69_r14_205_T	ATCYGYTAITTTTCTCCATCTAT	23
		RT_AS69_r15_205_T	ATCYGYTAITTTTCTCCATCTAC	23
		RT_AS69_r16_205_T	ATCYGYTAITTTTCTCCATCTAA	23
	206	RT_AS69_r1_206_G	TCTCTGARATCYACTAITTTTCTCCATTTA	30
		RT_AS69_r2_206_G	TCTCTGARATCYACTAITTTTCTCCATCTA	30
		RT_AS69_r3_206_G	TCTCTGARATCYATTAITTTTCTCCATTTA	30
		RT_AS69_r4_206_G	TCTCTGARATCYATTAITTTTCTCCATCTA	30
		RT_AS69_r5_206_G	TCTCTGARATCYGCTAITTTTCTCCATTTA	30
		RT_AS69_r6_206_G	TCTCTGARATCYGCTAITTTTCTCCATCTA	30
		RT_AS69_r7_206_G	TCTCTGARATCYGTTAITTTTCTCCATTTA	30

		RT_AS69_r8_206_G	TCTCTGARATCYGTTAITTTTCTCCATCTA	30
207		RT_AS69_r1_207_A	TTCTCTGARATCYACTAITTTTCTCCATTT	30
		RT_AS69_r2_207_A	TTCTCTGARATCYACTAITTTTCTCCATCT	30
		RT_AS69_r3_207_A	TTCTCTGARATCYATTAITTTTCTCCATTT	30
		RT_AS69_r4_207_A	TTCTCTGARATCYATTAITTTTCTCCATCT	30
		RT_AS69_r5_207_A	TTCTCTGARATCYGCTAITTTTCTCCATTT	30
		RT_AS69_r6_207_A	TTCTCTGARATCYGCTAITTTTCTCCATCT	30
		RT_AS69_r7_207_A	TTCTCTGARATCYGTTAITTTTCTCCATTT	30
		RT_AS69_r8_207_A	TTCTCTGARATCYGTTAITTTTCTCCATCT	30
70	208	RT_AS70_r1_208_T	GTTCTCTGARATCYACTAATTTTCTCCATT	30
		RT_AS70_r2_208_T	GTTCTCTGARATCYACTAATTTTCTCCATC	30
		RT_AS70_r3_208_T	GTTCTCTGARATCYACTACTTTTCTCCATT	30
		RT_AS70_r4_208_T	GTTCTCTGARATCYACTACTTTTCTCCATC	30
		RT_AS70_r5_208_T	GTTCTCTGARATCYACTATTTTTCTCCATT	30
		RT_AS70_r6_208_T	GTTCTCTGARATCYACTATTTTTCTCCATC	30
		RT_AS70_r7_208_T	GTTCTCTGARATCYATTAATTTTTCTCCATT	30
		RT_AS70_r8_208_T	GTTCTCTGARATCYATTAATTTTTCTCCATC	30
		RT_AS70_r9_208_T	GTTCTCTGARATCYATTACTTTTCTCCATT	30
		RT_AS70_r10_208_T	GTTCTCTGARATCYATTACTTTTCTCCATC	30
		RT_AS70_r11_208_T	GTTCTCTGARATCYATTATTTTTCTCCATT	30
		RT_AS70_r12_208_T	GTTCTCTGARATCYATTATTTTTCTCCATC	30
		RT_AS70_r13_208_T	GTTCTCTGARATCYGCTAATTTTTCTCCATT	30
		RT_AS70_r14_208_T	GTTCTCTGARATCYGCTAATTTTTCTCCATC	30
		RT_AS70_r15_208_T	GTTCTCTGARATCYGCTACTTTTCTCCATT	30
		RT_AS70_r16_208_T	GTTCTCTGARATCYGCTACTTTTCTCCATC	30
		RT_AS70_r17_208_T	GTTCTCTGARATCYGCTATTTTTCTCCATT	30
		RT_AS70_r18_208_T	GTTCTCTGARATCYGCTATTTTTCTCCATC	30
		RT_AS70_r19_208_T	GTTCTCTGARATCYGTTAATTTTTCTCCATT	30
		RT_AS70_r20_208_T	GTTCTCTGARATCYGTTAATTTTTCTCCATC	30
		RT_AS70_r21_208_T	GTTCTCTGARATCYGTTACTTTTCTCCATT	30
		RT_AS70_r22_208_T	GTTCTCTGARATCYGTTACTTTTCTCCATC	30
		RT_AS70_r23_208_T	GTTCTCTGARATCYGTTATTTTTCTCCATT	30
		RT_AS70_r24_208_T	GTTCTCTGARATCYGTTATTTTTCTCCATC	30
	209	RT_AS70_r1_209_T	AGTTCTCTGARATCYACTAATTTTTCTCCAT	30
		RT_AS70_r2_209_T	AGTTCTCTGARATCYACTACTTTTCTCCAT	30
		RT_AS70_r3_209_T	AGTTCTCTGARATCYACTATTTTTCTCCAT	30
		RT_AS70_r4_209_T	AGTTCTCTGARATCYATTAATTTTTCTCCAT	30
		RT_AS70_r5_209_T	AGTTCTCTGARATCYATTACTTTTCTCCAT	30
		RT_AS70_r6_209_T	AGTTCTCTGARATCYATTATTTTTCTCCAT	30
		RT_AS70_r7_209_T	AGTTCTCTGARATCYGCTAATTTTTCTCCAT	30
		RT_AS70_r8_209_T	AGTTCTCTGARATCYGCTACTTTTCTCCAT	30
		RT_AS70_r9_209_T	AGTTCTCTGARATCYGCTATTTTTCTCCAT	30
		RT_AS70_r10_209_T	AGTTCTCTGARATCYGTTAATTTTTCTCCAT	30
		RT_AS70_r11_209_T	AGTTCTCTGARATCYGTTACTTTTCTCCAT	30
		RT_AS70_r12_209_T	AGTTCTCTGARATCYGTTATTTTTCTCCAT	30
	210	RT_AS70_r1_210_T	AAGTTCTCTGARATCYACTAATTTTTCTCCA	30
		RT_AS70_r2_210_T	AAGTTCTCTGARATCYACTACTTTTCTCCA	30
		RT_AS70_r3_210_T	AAGTTCTCTGARATCYACTATTTTTCTCCA	30
		RT_AS70_r4_210_T	AAGTTCTCTGARATCYATTAATTTTTCTCCA	30
		RT_AS70_r5_210_T	AAGTTCTCTGARATCYATTACTTTTCTCCA	30
		RT_AS70_r6_210_T	AAGTTCTCTGARATCYATTATTTTTCTCCA	30
		RT_AS70_r7_210_T	AAGTTCTCTGARATCYGCTAATTTTTCTCCA	30
		RT_AS70_r8_210_T	AAGTTCTCTGARATCYGCTACTTTTCTCCA	30
		RT_AS70_r9_210_T	AAGTTCTCTGARATCYGCTATTTTTCTCCA	30
		RT_AS70_r10_210_T	AAGTTCTCTGARATCYGTTAATTTTTCTCCA	30
		RT_AS70_r11_210_T	AAGTTCTCTGARATCYGTTACTTTTCTCCA	30

		RT_AS70_r12_210_T	AAGTTCTCTGARATCYGTTATTTTTCTCCA	30
74	220	RT_AS74_r1_220_A	TTATTAAGTTCTCTGARATCTACTA	25
		RT_AS74_r2_220_A	TTATTAAGTTCTCTGARATCTATTA	25
		RT_AS74_r3_220_A	TTATTAAGTTCTCTGARATCTGCTA	25
		RT_AS74_r4_220_A	TTATTAAGTTCTCTGARATCTGTTA	25
		RT_AS74_r5_220_A	TTATTAAGTTCTCTGARATCCACTA	25
		RT_AS74_r6_220_A	TTATTAAGTTCTCTGARATCCATTA	25
		RT_AS74_r7_220_A	TTATTAAGTTCTCTGARATCCGCTA	25
		RT_AS74_r8_220_A	TTATTAAGTTCTCTGARATCCGTTA	25
	221	RT_AS74_r1_221_A	TYTTATTAAGTTCTCTGARATCTACT	26
		RT_AS74_r2_221_A	TYTTATTAAGTTCTCTGARATCTATT	26
		RT_AS74_r3_221_A	TYTTATTAAGTTCTCTGARATCTGCT	26
		RT_AS74_r4_221_A	TYTTATTAAGTTCTCTGARATCTGTT	26
		RT_AS74_r5_221_A	TYTTATTAAGTTCTCTGARATCCACT	26
		RT_AS74_r6_221_A	TYTTATTAAGTTCTCTGARATCCATT	26
		RT_AS74_r7_221_A	TYTTATTAAGTTCTCTGARATCCGCT	26
		RT_AS74_r8_221_A	TYTTATTAAGTTCTCTGARATCCGTT	26
	222	RT_AS74_r1_222_T	TYTTATTAAGTTCTCTGARATCTAC	25
		RT_AS74_r2_222_T	TYTTATTAAGTTCTCTGARATCTAT	25
		RT_AS74_r3_222_T	TYTTATTAAGTTCTCTGARATCTGC	25
		RT_AS74_r4_222_T	TYTTATTAAGTTCTCTGARATCTGT	25
		RT_AS74_r5_222_T	TYTTATTAAGTTCTCTGARATCCAC	25
		RT_AS74_r6_222_T	TYTTATTAAGTTCTCTGARATCCAT	25
		RT_AS74_r7_222_T	TYTTATTAAGTTCTCTGARATCCGC	25
		RT_AS74_r8_222_T	TYTTATTAAGTTCTCTGARATCCGT	25
75	223	RT_AS75_r1_223_C	GAGTTYTYTTATTAAGTTCTCTGAAATCTA	30
		RT_AS75_r2_223_C	GAGTTYTYTTATTAAGTTCTCTGAAATCTG	30
		RT_AS75_r3_223_C	GAGTTYTYTTATTAAGTTCTCTGAAATCCA	30
		RT_AS75_r4_223_C	GAGTTYTYTTATTAAGTTCTCTGAAATCCG	30
		RT_AS75_r5_223_C	GAGTTYTYTTATTAAGTTCTCTGAGATCTA	30
		RT_AS75_r6_223_C	GAGTTYTYTTATTAAGTTCTCTGAGATCTG	30
		RT_AS75_r7_223_C	GAGTTYTYTTATTAAGTTCTCTGAGATCCA	30
		RT_AS75_r8_223_C	GAGTTYTYTTATTAAGTTCTCTGAGATCCG	30
	224	RT_AS75_r1_224_A	TGAGTTYTYTTATTAAGTTCTCTGAAATCT	30
		RT_AS75_r2_224_A	TGAGTTYTYTTATTAAGTTCTCTGAAATCC	30
		RT_AS75_r3_224_A	TGAGTTYTYTTATTAAGTTCTCTGAGATCT	30
		RT_AS75_r4_224_A	TGAGTTYTYTTATTAAGTTCTCTGAGATCC	30
	225	RT_AS75_r1_225_T	TTGAGTTYTYTTATTAAGTTCTCTGAAATC	30
		RT_AS75_r2_225_T	TTGAGTTYTYTTATTAAGTTCTCTGAGATC	30
77	229	RT_AS77_r1_229_A	TCTTGAGTTYTYTTATTAAGTTCTCTGA	28
	230	RT_AS77_r1_230_A	TCTTGAGTTYTYTTATTAAGTTCTCTG	27
	231	RT_AS77_r1_231_G	TCTTGAGTTYTYTTATTAAGTTCTCT	26
98	292	RT_AS98_f1_292_G	TGGGAAGTTCAATTAGGAATACCACATCCT	30
	293	RT_AS98_f1_293_C	GGGAAGTTCAATTAGGAATACCACATCCTG	30
		RT_AS98_f2_293_C	GGGAAGTTCAATTAGGAATACCACATCCTT	30
		RT_AS98_f3_293_C	GGGAAGTTCAATTAGGAATACCACATCCCG	30
		RT_AS98_f4_293_C	GGGAAGTTCAATTAGGAATACCACATCCCT	30
	294	RT_AS98_f1_294_A	GGAAGTTCAATTAGGAATACCACATCCTGC	30
		RT_AS98_f2_294_A	GGAAGTTCAATTAGGAATACCACATCCTTC	30
		RT_AS98_f3_294_A	GGAAGTTCAATTAGGAATACCACATCCCGC	30
		RT_AS98_f4_294_A	GGAAGTTCAATTAGGAATACCACATCCCTC	30
		RT_AS98_f5_294_A	GGAAGTTCAATTAGGAATACCACATCCTGG	30
		RT_AS98_f6_294_A	GGAAGTTCAATTAGGAATACCACATCCTTG	30

		RT_AS98_f7_294_A	GGAAGTTCAATTAGGAATACCACATCCCGG	30
		RT_AS98_f8_294_A	GGAAGTTCAATTAGGAATACCACATCCCTG	30
100	298	RT_AS100_f1_298_T	GTTCAATTAGGAATACCACATCCYGCAGGG	30
		RT_AS100_f2_298_T	GTTCAATTAGGAATACCACATCCYGGAGGG	30
		RT_AS100_f3_298_T	GTTCAATTAGGAATACCACATCCYTCAGGG	30
		RT_AS100_f4_298_T	GTTCAATTAGGAATACCACATCCYTGAGGG	30
	299	RT_AS100_f1_299_T	TTCAATTAGGAATACCACATCCYGCAGGGT	30
		RT_AS100_f2_299_T	TTCAATTAGGAATACCACATCCYGGAGGGT	30
		RT_AS100_f3_299_T	TTCAATTAGGAATACCACATCCYTCAGGGT	30
		RT_AS100_f4_299_T	TTCAATTAGGAATACCACATCCYTGAGGGT	30
		RT_AS100_f5_299_T	TTCAATTAGGAATACCACATCCYGCAGGGA	30
		RT_AS100_f6_299_T	TTCAATTAGGAATACCACATCCYGGAGGGA	30
		RT_AS100_f7_299_T	TTCAATTAGGAATACCACATCCYTCAGGGA	30
		RT_AS100_f8_299_T	TTCAATTAGGAATACCACATCCYTGAGGGA	30
	300	RT_AS100_f1_300_A	TCAATTAGGAATACCACATCCYGCAGGGTT	30
		RT_AS100_f2_300_A	TCAATTAGGAATACCACATCCYGGAGGGTT	30
		RT_AS100_f3_300_A	TCAATTAGGAATACCACATCCYTCAGGGTT	30
		RT_AS100_f4_300_A	TCAATTAGGAATACCACATCCYTGAGGGTT	30
		RT_AS100_f5_300_A	TCAATTAGGAATACCACATCCYGCAGGGAT	30
		RT_AS100_f6_300_A	TCAATTAGGAATACCACATCCYGGAGGGAT	30
		RT_AS100_f7_300_A	TCAATTAGGAATACCACATCCYTCAGGGAT	30
		RT_AS100_f8_300_A	TCAATTAGGAATACCACATCCYTGAGGGAT	30
101	301	RT_AS101_f1_301_A	CAATTAGGAATACCACATCCYKCAGGGTTA	30
		RT_AS101_f2_301_A	CAATTAGGAATACCACATCCYKCAGGGATA	30
		RT_AS101_f3_301_A	CAATTAGGAATACCACATCCYKGAGGGTTA	30
		RT_AS101_f4_301_A	CAATTAGGAATACCACATCCYKGAGGGATA	30
	302	RT_AS101_f1_302_A	AATTAGGAATACCACATCCYKCAGGGTTAA	30
		RT_AS101_f2_302_A	AATTAGGAATACCACATCCYKCAGGGATAA	30
		RT_AS101_f3_302_A	AATTAGGAATACCACATCCYKGAGGGTTAA	30
		RT_AS101_f4_302_A	AATTAGGAATACCACATCCYKGAGGGATAA	30
		RT_AS101_f5_302_A	AATTAGGAATACCACATCCYKCAGGGTTAG	30
		RT_AS101_f6_302_A	AATTAGGAATACCACATCCYKCAGGGATAG	30
		RT_AS101_f7_302_A	AATTAGGAATACCACATCCYKGAGGGTTAG	30
		RT_AS101_f8_302_A	AATTAGGAATACCACATCCYKGAGGGATAG	30
		RT_AS101_f9_302_A	AATTAGGAATACCACATCCYKCAGGGTTAC	30
		RT_AS101_f10_302_A	AATTAGGAATACCACATCCYKCAGGGATAC	30
		RT_AS101_f11_302_A	AATTAGGAATACCACATCCYKGAGGGTTAC	30
		RT_AS101_f12_302_A	AATTAGGAATACCACATCCYKGAGGGATAC	30
	303	RT_AS101_f1_303_A	ATTAGGAATACCACATCCYKCAGGGTTAAA	30
		RT_AS101_f2_303_A	ATTAGGAATACCACATCCYKCAGGGATAAA	30
		RT_AS101_f3_303_A	ATTAGGAATACCACATCCYKGAGGGTTAAA	30
		RT_AS101_f4_303_A	ATTAGGAATACCACATCCYKGAGGGATAAA	30
		RT_AS101_f5_303_A	ATTAGGAATACCACATCCYKCAGGGTTAGA	30
		RT_AS101_f6_303_A	ATTAGGAATACCACATCCYKCAGGGATAGA	30
		RT_AS101_f7_303_A	ATTAGGAATACCACATCCYKGAGGGTTAGA	30
		RT_AS101_f8_303_A	ATTAGGAATACCACATCCYKGAGGGATAGA	30
		RT_AS101_f9_303_A	ATTAGGAATACCACATCCYKCAGGGTTACA	30
		RT_AS101_f10_303_A	ATTAGGAATACCACATCCYKCAGGGATACA	30
		RT_AS101_f11_303_A	ATTAGGAATACCACATCCYKGAGGGTTACA	30
		RT_AS101_f12_303_A	ATTAGGAATACCACATCCYKGAGGGATACA	30
		RT_AS101_f13_303_A	ATTAGGAATACCACATCCYKCAGGGTTAAC	30
		RT_AS101_f14_303_A	ATTAGGAATACCACATCCYKCAGGGATAAC	30
		RT_AS101_f15_303_A	ATTAGGAATACCACATCCYKGAGGGTTAAC	30
		RT_AS101_f16_303_A	ATTAGGAATACCACATCCYKGAGGGATAAC	30
		RT_AS101_f17_303_A	ATTAGGAATACCACATCCYKCAGGGTTAGC	30

		RT_AS101_f18_303_A	ATTAGGAATACCACATCCYKCAGGGATAGC	30
		RT_AS101_f19_303_A	ATTAGGAATACCACATCCYKGAGGGTTAGC	30
		RT_AS101_f20_303_A	ATTAGGAATACCACATCCYKGAGGGATAGC	30
		RT_AS101_f21_303_A	ATTAGGAATACCACATCCYKCAGGGTTACC	30
		RT_AS101_f22_303_A	ATTAGGAATACCACATCCYKCAGGGATAACC	30
		RT_AS101_f23_303_A	ATTAGGAATACCACATCCYKGAGGGTTACC	30
		RT_AS101_f24_303_A	ATTAGGAATACCACATCCYKGAGGGATAACC	30
		RT_AS101_f25_303_A	ATTAGGAATACCACATCCYKCAGGGTTAAG	30
		RT_AS101_f26_303_A	ATTAGGAATACCACATCCYKCAGGGATAAG	30
		RT_AS101_f27_303_A	ATTAGGAATACCACATCCYKGAGGGTTAAG	30
		RT_AS101_f28_303_A	ATTAGGAATACCACATCCYKGAGGGATAAG	30
		RT_AS101_f29_303_A	ATTAGGAATACCACATCCYKCAGGGTTAGG	30
		RT_AS101_f30_303_A	ATTAGGAATACCACATCCYKCAGGGATAGG	30
		RT_AS101_f31_303_A	ATTAGGAATACCACATCCYKGAGGGTTAGG	30
		RT_AS101_f32_303_A	ATTAGGAATACCACATCCYKGAGGGATAGG	30
		RT_AS101_f33_303_A	ATTAGGAATACCACATCCYKCAGGGTTACG	30
		RT_AS101_f34_303_A	ATTAGGAATACCACATCCYKCAGGGATAACG	30
		RT_AS101_f35_303_A	ATTAGGAATACCACATCCYKGAGGGTTACG	30
		RT_AS101_f36_303_A	ATTAGGAATACCACATCCYKGAGGGATAACG	30
103	307	RT_AS103_r1_307_T	CCCACATCCAGTACTGTYAYTGATTTTTT	28
		RT_AS103_r2_307_T	CCCACATCCAGTACTGTYAYTGATTTTC	28
		RT_AS103_r3_307_T	CCCACATCCAGTACTGTYAYTGATTTTG	28
		RT_AS103_r4_307_T	CCCACATCCAGTACTGTYAYTGATTTGT	28
		RT_AS103_r5_307_T	CCCACATCCAGTACTGTYAYTGATTTGC	28
		RT_AS103_r6_307_T	CCCACATCCAGTACTGTYAYTGATTTGG	28
		RT_AS103_r7_307_T	CCCACATCCAGTACTGTYAYTGATTTAT	28
		RT_AS103_r8_307_T	CCCACATCCAGTACTGTYAYTGATTTAC	28
		RT_AS103_r9_307_T	CCCACATCCAGTACTGTYAYTGATTTAG	28
		RT_AS103_r10_307_T	CCCACATCCAGTACTGTYGYTGATTTTTT	28
		RT_AS103_r11_307_T	CCCACATCCAGTACTGTYGYTGATTTTC	28
		RT_AS103_r12_307_T	CCCACATCCAGTACTGTYGYTGATTTTG	28
		RT_AS103_r13_307_T	CCCACATCCAGTACTGTYGYTGATTTGT	28
		RT_AS103_r14_307_T	CCCACATCCAGTACTGTYGYTGATTTGC	28
		RT_AS103_r15_307_T	CCCACATCCAGTACTGTYGYTGATTTGG	28
		RT_AS103_r16_307_T	CCCACATCCAGTACTGTYGYTGATTTAT	28
		RT_AS103_r17_307_T	CCCACATCCAGTACTGTYGYTGATTTAC	28
		RT_AS103_r18_307_T	CCCACATCCAGTACTGTYGYTGATTTAG	28
	308	RT_AS103_r1_308_T	CCCACATCCAGTAYTGTYACTGATTTTT	27
		RT_AS103_r2_308_T	CCCACATCCAGTAYTGTYACTGATTTG	27
		RT_AS103_r3_308_T	CCCACATCCAGTAYTGTYACTGATTTA	27
		RT_AS103_r4_308_T	CCCACATCCAGTAYTGTYATTGATTTTT	27
		RT_AS103_r5_308_T	CCCACATCCAGTAYTGTYATTGATTTG	27
		RT_AS103_r6_308_T	CCCACATCCAGTAYTGTYATTGATTTA	27
		RT_AS103_r7_308_T	CCCACATCCAGTAYTGTYGCTGATTTTT	27
		RT_AS103_r8_308_T	CCCACATCCAGTAYTGTYGCTGATTTG	27
		RT_AS103_r9_308_T	CCCACATCCAGTAYTGTYGCTGATTTA	27
		RT_AS103_r10_308_T	CCCACATCCAGTAYTGTYGTTGATTTTT	27
		RT_AS103_r11_308_T	CCCACATCCAGTAYTGTYGTTGATTTG	27
		RT_AS103_r12_308_T	CCCACATCCAGTAYTGTYGTTGATTTA	27
	309	RT_AS103_r1_309_T	CCCACATCYAGTAYTGTTACTGATTTT	26
		RT_AS103_r2_309_T	CCCACATCYAGTAYTGTTATTGATTTT	26
		RT_AS103_r3_309_T	CCCACATCYAGTAYTGTTGCTGATTTT	26
		RT_AS103_r4_309_T	CCCACATCYAGTAYTGTTGTTGATTTT	26
		RT_AS103_r5_309_T	CCCACATCYAGTAYTGTCACTGATTTT	26
		RT_AS103_r6_309_T	CCCACATCYAGTAYTGTCATTGATTTT	26
		RT_AS103_r7_309_T	CCCACATCYAGTAYTGTCGCTGATTTT	26

		RT_AS103_r8_309_T	CCCACATCYAGTAYTGTGCGTTGATTT	26
106	316	RT_AS106_r1_316_C	ATGCATCACCCACATCYAGTAYTGTTA	27
		RT_AS106_r2_316_C	ATGCATCACCCACATCYAGTAYTGTTG	27
		RT_AS106_r3_316_C	ATGCATCACCCACATCYAGTAYTGTC	27
		RT_AS106_r4_316_C	ATGCATCACCCACATCYAGTAYTGTCG	27
	317	RT_AS106_r1_317_A	ATGCATCACCCACATCYAGTACTGTT	26
		RT_AS106_r2_317_A	ATGCATCACCCACATCYAGTACTGTC	26
		RT_AS106_r3_317_A	ATGCATCACCCACATCYAGTATTGTT	26
		RT_AS106_r4_317_A	ATGCATCACCCACATCYAGTATTGTC	26
	318	RT_AS106_r1_318_T	AAWATGCATCACCCACATCCAGTACTGT	28
		RT_AS106_r2_318_T	AAWATGCATCACCCACATCCAGTATTGT	28
		RT_AS106_r3_318_T	AAWATGCATCACCCACATCTAGTACTGT	28
		RT_AS106_r4_318_T	AAWATGCATCACCCACATCTAGTATTGT	28
108	322	RT_AS108_r1_322_C	AAWATGCATCACCCACATCCAGTA	24
		RT_AS108_r2_322_C	AAWATGCATCACCCACATCTAGTA	24
	323	RT_AS108_r1_323_A	AAWATGCATCACCCACATCCAGT	23
		RT_AS108_r2_323_A	AAWATGCATCACCCACATCTAGT	23
	324	RT_AS108_r1_324_T	AAWATGCATCACCCACATCCAG	22
		RT_AS108_r2_324_T	AAWATGCATCACCCACATCTAG	22
115	343	RT_AS115_f1_343_T	ACARTACTRGATGTGGGTGATGCA	24
	344	RT_AS115_f1_344_A	ACARTACTRGATGTGGGTGATGCAT	25
	345	RT_AS115_f1_345_T	ACARTACTRGATGTGGGTGATGCATA	26
		RT_AS115_f2_345_T	ACARTACTRGATGTGGGTGATGCATT	26
116	346	RT_AS116_r1_346_A	CTGAAKTCTTYATCTAAGGGAAGTGA	28
		RT_AS116_r2_346_A	CTGAAKTCTTYATCTAAGGGAAGTGAAT	28
		RT_AS116_r3_346_A	CTGAAKTCTTYATCTAAGGGAAGTGA	28
		RT_AS116_r4_346_A	CTGAAKTCTTYATCTAAGGGAAGTGA	28
		RT_AS116_r5_346_A	CTGAAKTCTTYATCTAAGGGAAGTGA	28
		RT_AS116_r6_346_A	CTGAAKTCTTYATCTAAGGGAAGTGA	28
		RT_AS116_r7_346_A	CTGAAKTCTTYATCTAAGGGAAGTGA	28
		RT_AS116_r8_346_A	CTGAAKTCTTYATCTAAGGGAAGTGA	28
	347	RT_AS116_r1_347_A	CTGAAKTCTTYATCTAAGGGAAGTGA	27
		RT_AS116_r2_347_A	CTGAAKTCTTYATCTAAGGGAAGTGA	27
		RT_AS116_r3_347_A	CTGAAKTCTTYATCTAAGGGAAGTGA	27
		RT_AS116_r4_347_A	CTGAAKTCTTYATCTAAGGGAAGTGA	27
	348	RT_AS116_r1_348_A	CTGAAKTCTTYATCTAAGGGAAGTGA	26
		RT_AS116_r2_348_A	CTGAAKTCTTYATCTAAGGGAAGTGA	26
118	352	RT_AS118_r1_352_C	TATACTTYCTGAAKTCTTTATCTAAGGGAA	30
		RT_AS118_r2_352_C	TATACTTYCTGAAKTCTTTCATCTAAGGGAA	30
	353	RT_AS118_r_353_A	GTATACTTYCTGAAKTCTTTATCTAAGGGAA	30
	354	RT_AS118_r1_354_A	AGTATACTTYCTGAAKTCTTTATCTAAGGGAA	30
		RT_AS118_r2_354_A	AGTATACTTYCTGAAKTCTTTCATCTAAGGGAA	30
151	451	RT_AS151_r1_451_G	GGAATATTGCTGGTGATCCTTTCCATCCCT	30
		RT_AS151_r2_451_G	GGAATATTGCTGGTGATCCTTTCCATCCCA	30
	452	RT_AS151_r1_452_T	TGGAATATTGCTGGTGATCCTTTCCATCCC	30
	453	RT_AS151_r1_453_C	TTGGAATATTGCTGGTGATCCTTTCCATCC	30
179	353	RT_AS179_f1_535_G	GAGCCTTTTAGAAAAACAAAATCCAGACATA	30
		RT_AS179_f2_535_G	GAGCCTTTTAGAAAAACAAAATCCAGAAATA	30
	356	RT_AS179_f1_536_T	AGCCTTTTAGAAAAACAAAATCCAGACATAG	30
		RT_AS179_f2_536_T	AGCCTTTTAGAAAAACAAAATCCAGAAATAG	30

	357	RT_AS179_f1_537_C	GCCTTTTAGAAAACAAAATCCAGACATAGT	30
		RT_AS179_f2_537_C	GCCTTTTAGAAAACAAAATCCAGAAATAGT	30
181	451	RT_AS181_f1_541_T	TTTAGAAAACAAAATCCAGAMATAGTCATC	30
		RT_AS181_f2_541_T	TTTAGAAAACAAAATCCAGAMATAGTTATC	30
	452	RT_AS181_f1_542_A	TTAGAAAACAAAATCCAGAMATAGTTATCT	30
		RT_AS181_f2_542_A	TTAGAAAACAAAATCCAGAMATAGTCATCT	30
	453	RT_AS181_f1_543_T	TAGAAAACAAAATCCAGAMATAGTTATCTA	30
		RT_AS181_r1_543_A	TACHTACAAATCATCIATGTATTG	24
		RT_AS181_r2_543_A	TACHTACAAATCATCIACGTATTG	24
184	550	RT_AS184_f1_550_A	CAAAATCCAGAMATAGTYATCTATCAATAC	30
		RT_AS184_f2_550_A	CAAAATCCAGAMATAGTYATCTGTCAATAC	30
	551	RT_AS184_f1_551_T	AAAATCCAGAMATAGTYATCTATCAATACA	30
		RT_AS184_f2_551_T	AAAATCCAGAMATAGTYATCTATCAATACG	30
		RT_AS184_f3_551_T	AAAATCCAGAMATAGTYATCTGTCAATACA	30
		RT_AS184_f4_551_T	AAAATCCAGAMATAGTYATCTGTCAATACG	30
	552	RT_AS184_f1_552_G	AAATCCAGAMATAGTYATCTATCAATACAT	30
		RT_AS184_f2_552_G	AAATCCAGAMATAGTYATCTATCAATACGT	30
		RT_AS184_f3_552_G	AAATCCAGAMATAGTYATCTGTCAATACAT	30
		RT_AS184_f4_552_G	AAATCCAGAMATAGTYATCTGTCAATACGT	30
188	562	RT_AS188_f1_562_T	ATAGTTATCTRTCAATACRTGGATGATTTG	30
		RT_AS188_f2_562_T	ATAGTTATCTRTCAATACRTTGATGATTTG	30
		RT_AS188_f3_562_T	ATAGTTATCTRTCAATACRTCGATGATTTG	30
		RT_AS188_f4_562_T	ATAGTTATCTRTCAATACRTAGATGATTTG	30
	563	RT_AS188_f1_563_A	TAGTTATCTRTCAATACRTGGATGATTTGT	30
		RT_AS188_f2_563_A	TAGTTATCTRTCAATACRTTGATGATTTGT	30
		RT_AS188_f3_563_A	TAGTTATCTRTCAATACRTCGATGATTTGT	30
		RT_AS188_f4_563_A	TAGTTATCTRTCAATACRTAGATGATTTGT	30
		RT_AS188_f5_563_A	TAGTTATCTRTCAATACRTGGATGATTTGC	30
		RT_AS188_f6_563_A	TAGTTATCTRTCAATACRTTGATGATTTGC	30
		RT_AS188_f7_563_A	TAGTTATCTRTCAATACRTCGATGATTTGC	30
		RT_AS188_f8_563_A	TAGTTATCTRTCAATACRTAGATGATTTGC	30
	564	RT_AS188_f1_564_T	AGTTATCTRTCAATACATIGATGATTTGTA	30
		RT_AS188_f2_564_T	AGTTATCTRTCAATACATIGATGATTTGTT	30
		RT_AS188_f3_564_T	AGTTATCTRTCAATACATIGATGATTTGCA	30
		RT_AS188_f4_564_T	AGTTATCTRTCAATACATIGATGATTTGCT	30
		RT_AS188_f5_564_T	AGTTATCTRTCAATACGTIGATGATTTGTA	30
		RT_AS188_f6_564_T	AGTTATCTRTCAATACGTIGATGATTTGTT	30
		RT_AS188_f7_564_T	AGTTATCTRTCAATACGTIGATGATTTGCA	30
		RT_AS188_f8_564_T	AGTTATCTRTCAATACGTIGATGATTTGCT	30
190	568	RT_AS190_r1_568_C	TCTATGYTGYYCTATTTCTAAGTCAGATC	29
		RT_AS190_r2_568_C	TCTATGYTGYYCTATTTCTAAGTCAGATG	29
		RT_AS190_r3_568_C	TCTATGYTGYYCTATTTCTAAGTCAGATT	29
		RT_AS190_r4_568_C	TCTATGYTGYYCTATTTCTAAGTCAGAAC	29
		RT_AS190_r5_568_C	TCTATGYTGYYCTATTTCTAAGTCAGAAG	29
		RT_AS190_r6_568_C	TCTATGYTGYYCTATTTCTAAGTCAGAAT	29
	569	RT_AS190_r1_569_C	TCTATGYTGYYCTATTTCTAAGTCAGAT	28
		RT_AS190_r2_569_C	TCTATGYTGYYCTATTTCTAAGTCAGAA	28
		RT_AS190_r3_569_C	TCTATGYTGYYCTATTTCTAAGTCAGAT	28
		RT_AS190_r4_569_C	TCTATGYTGYYCTATTTCTAAGTCAGAA	28
	570	RT_AS190_r1_570_T	TCTATGYTGYYCTATTTCTAAGTCAGA	27
		RT_AS190_r2_570_T	TCTATGYTGYYCTATTTCTAAGTCAGA	27
210	628	RT_AS210_f1_628_T	CAAAAATAGAGGAACTGAGACAACATCTG	29

		RT_AS210_f2_628_T	CAAAAATAGAGGAACTGAGAGAACATCTG	29
629		RT_AS210_f1_629_T	CAAAAATAGAGGAACTGAGASAACATCTGT	30
		RT_AS210_f2_629_T	CAAAAATAGAGGAACTGAGASAACATCTGG	30
630		RT_AS210_f1_630_G	AAAAATAGAGGAACTGAGASAACATCTGTT	30
		RT_AS210_f2_630_G	AAAAATAGAGGAACTGAGASAACATCTGTG	30
		RT_AS210_f3_630_G	AAAAATAGAGGAACTGAGASAACATCTGGT	30
		RT_AS210_f4_630_G	AAAAATAGAGGAACTGAGASAACATCTGGG	30
215	643	RT_AS215_f1_643_A	AACATCTGKTIAGGTGGGGATTT	23
		RT_AS215_f2_643_A	AACATCTGKTIAGGTGGGGGTTT	23
		RT_AS215_f3_643_A	AACATCTGKTIAGGTGGGGATTT	23
		RT_AS215_f4_643_A	AACATCTGKTIAGGTGGGGGTTT	23
		RT_AS215_f5_643_A	AACATCTGKGIAGGTGGGGATTT	23
		RT_AS215_f6_643_A	AACATCTGKGIAGGTGGGGGTTT	23
		RT_AS215_f7_643_A	AACATCTGKGIAGGTGGGGATTT	23
		RT_AS215_f8_643_A	AACATCTGKGIAGGTGGGGGTTT	23
644		RT_AS215_f1_644_C	AACATCTGKTIAGGTGGGGATTTA	24
		RT_AS215_f2_644_C	AACATCTGKTIAGGTGGGGGTTA	24
		RT_AS215_f3_644_C	AACATCTGKTIAGGTGGGGATTTA	24
		RT_AS215_f4_644_C	AACATCTGKTIAGGTGGGGGTTA	24
		RT_AS215_f5_644_C	AACATCTGKGIAGGTGGGGATTTA	24
		RT_AS215_f6_644_C	AACATCTGKGIAGGTGGGGGTTA	24
		RT_AS215_f7_644_C	AACATCTGKGIAGGTGGGGATTTA	24
		RT_AS215_f8_644_C	AACATCTGKGIAGGTGGGGGTTA	24
		RT_AS215_f9_644_C	AACATCTGKTIAGGTGGGGATTTT	24
		RT_AS215_f10_644_C	AACATCTGKTIAGGTGGGGGTTT	24
		RT_AS215_f11_644_C	AACATCTGKTIAGGTGGGGATTTT	24
		RT_AS215_f12_644_C	AACATCTGKTIAGGTGGGGGTTT	24
		RT_AS215_f13_644_C	AACATCTGKGIAGGTGGGGATTTT	24
		RT_AS215_f14_644_C	AACATCTGKGIAGGTGGGGGTTT	24
		RT_AS215_f15_644_C	AACATCTGKGIAGGTGGGGATTTT	24
		RT_AS215_f16_644_C	AACATCTGKGIAGGTGGGGGTTT	24
		RT_AS215_f17_644_C	AACATCTGKTIAGGTGGGGATTTG	24
		RT_AS215_f18_644_C	AACATCTGKTIAGGTGGGGGTTG	24
		RT_AS215_f19_644_C	AACATCTGKTIAGGTGGGGATTTG	24
		RT_AS215_f20_644_C	AACATCTGKTIAGGTGGGGGTTG	24
		RT_AS215_f21_644_C	AACATCTGKGIAGGTGGGGATTTG	24
		RT_AS215_f22_644_C	AACATCTGKGIAGGTGGGGGTTG	24
		RT_AS215_f23_644_C	AACATCTGKGIAGGTGGGGATTTG	24
		RT_AS215_f24_644_C	AACATCTGKGIAGGTGGGGGTTG	24
645		RT_AS215_f1_645_C	AACATCTGTKIARGTGGGGATTTAC	25
		RT_AS215_f2_645_C	AACATCTGTKIARGTGGGGATTTAA	25
		RT_AS215_f3_645_C	AACATCTGTKIARGTGGGGATTTAT	25
		RT_AS215_f4_645_C	AACATCTGTKIARGTGGGGATTTAG	25
		RT_AS215_f5_645_C	AACATCTGTKIARGTGGGGATTTTC	25
		RT_AS215_f6_645_C	AACATCTGTKIARGTGGGGATTTTA	25
		RT_AS215_f7_645_C	AACATCTGTKIARGTGGGGATTTTT	25
		RT_AS215_f8_645_C	AACATCTGTKIARGTGGGGATTTTG	25
		RT_AS215_f9_645_C	AACATCTGTKIARGTGGGGATTTGC	25
		RT_AS215_f10_645_C	AACATCTGTKIARGTGGGGATTTGA	25
		RT_AS215_f11_645_C	AACATCTGTKIARGTGGGGATTTGT	25
		RT_AS215_f12_645_C	AACATCTGTKIARGTGGGGATTTGG	25
		RT_AS215_f13_645_C	AACATCTGTKIARGTGGGGGTTTAC	25
		RT_AS215_f14_645_C	AACATCTGTKIARGTGGGGGTTTAA	25
		RT_AS215_f15_645_C	AACATCTGTKIARGTGGGGGTTTAT	25
		RT_AS215_f16_645_C	AACATCTGTKIARGTGGGGGTTTAG	25
		RT_AS215_f17_645_C	AACATCTGTKIARGTGGGGGTTTTC	25

		RT_AS215_f18_645_C	AACATCTGTGIARGTGGGGGTTTTA	25
		RT_AS215_f19_645_C	AACATCTGTGIARGTGGGGGTTTTT	25
		RT_AS215_f20_645_C	AACATCTGTGIARGTGGGGGTTTTG	25
		RT_AS215_f21_645_C	AACATCTGTGIARGTGGGGGTTTTGC	25
		RT_AS215_f22_645_C	AACATCTGTGIARGTGGGGGTTTTGA	25
		RT_AS215_f23_645_C	AACATCTGTGIARGTGGGGGTTTTGT	25
		RT_AS215_f24_645_C	AACATCTGTGIARGTGGGGGTTTTGG	25
219	655	RT_AS219_f_655_A	CTGTTGAGGTGGGGATTTACCACACCAGAC	30
	656	RT_AS219_f_656_A	TGTTGAGGTGGGGATTTACCACACCAGACA	30
	657	RT_AS219_f_657_A	GTTGAGGTGGGGATTTACCACACCAGACAA	30
225	673	RT_AS225_r_673_G	GGAGTTCATAACCCATCCAAAGGAATGGAG	30
	674	RT_AS225_r_674_G	TGGAGTTCATAACCCATCCAAAGGAATGGA	30
	675	RT_AS225_r_675_A	ATGGAGTTCATAACCCATCCAAAGGAATGG	30
227	379	RT_AS227_r_379_A	CAGGATGGAGTTCATAACCCATCCAAAGGA	30
	380	RT_AS227_r_380_A	TCAGGATGGAGTTCATAACCCATCCAAAGG	30
	381	RT_AS227_r_381_G	ATCAGGATGGAGTTCATAACCCATCCAAAG	30
230	688	RT_AS230_r1_688_T	TATCARGATGGAGTTCATAACCCA	24
	689	RT_AS230_r1_689_A	GTCCADITATCAGGATGGAGTTCATAACCC	30
		RT_AS230_r2_689_A	GTCCADITATCAAGATGGAGTTCATAACCC	30
	690	RT_AS230_r1_690_C	TGTCCADITATCAGGATGGAGTTCATAACC	30
		RT_AS230_r2_690_C	TGTCCADITATCAAGATGGAGTTCATAACC	30
236	706	RT_AS236_r1_706_T	TATAGGCTGTACTGTCCATTTATCAG	26
		RT_AS236_f1_706_C	YTKGATGGGTTATGAACTCCAT	22
		RT_AS236_f2_706_C	YTKGCTGGGTTATGAACTCCAT	22
		RT_AS236_f3_706_C	YTKTATGGGTTATGAACTCCAT	22
		RT_AS236_f4_706_C	YTKTCTGGGTTATGAACTCCAT	22
	707	RT_AS236_r1_707_A	AGCYYTATAGGCTGTACTGTCCATTTATCA	30
		RT_AS236_f1_707_C	TKGATGGGTTATGAACTCCATC	22
		RT_AS236_f2_707_C	TKGCTGGGTTATGAACTCCATC	22
		RT_AS236_f3_707_C	TKTATGGGTTATGAACTCCATC	22
	708	RT_AS236_r1_708_C	CAGCYYTATAGGCTGTACTGTCCATTTATC	30
		RT_AS236_f4_707_C	TKTCTGGGTTATGAACTCCATC	22
		RT_AS236_f1_708_T	TKKATGGGTTATGAACTCCATCC	23
		RT_AS236_f2_708_T	TKKATGGGTTATGAACTCCATCT	23
		RT_AS236_f3_708_T	TKKCTGGGTTATGAACTCCATCC	23
		RT_AS236_f4_708_T	TKKCTGGGTTATGAACTCCATCT	23
238	712	RT_AS238_r1_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCATT	30
		RT_AS238_r2_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCATC	30
		RT_AS238_r3_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCATG	30
		RT_AS238_r4_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCAAT	30
		RT_AS238_r5_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCAAC	30
		RT_AS238_r6_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCAAG	30
		RT_AS238_r7_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCAGT	30
		RT_AS238_r8_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCAGC	30
		RT_AS238_r9_712_T	CTGGCAGCWYTATAGGCTGTACTGTCCAGG	30
	713	RT_AS238_r1_713_T	TCTGGCAGCWYTATAGGCTGTACTGTCCAT	30
		RT_AS238_r2_713_T	TCTGGCAGCWYTATAGGCTGTACTGTCCAA	30
		RT_AS238_r3_713_T	TCTGGCAGCWYTATAGGCTGTACTGTCCAG	30
	714	RT_AS238_r1_714_T	TTCTGGCAGCWYTATAGGCTGTACTGTCCA	30