

Additional file 4 – List of synthetic oligonucleotide primers used in the construction of plasmids.

<u>Plasmid</u>	<u>Primers</u>	<u>Sequence (5' to 3')</u>
pRTL2/p36	Fp135 Rp107 Fp447 Rp448	GGCGGGCCATGGAGGGTTTGAAGGCTGAGTCTACCACAACCTGTGGG GGTAGACGCACTAGGCCCGGGTTTGACACCGAGGGATTCC GGAATCCCTCGGTGTCAAATAGCCCGGGATCCTCTAGAGTCC GGACTCTAGAGGATCCCGGGCTATTGACACCGAGGGATTCC
pRTL2/p36-myc	Fp177 Rp178	CCGCGCAACAAAAGTTGATTCTGAAGAAGATTTGTAGAGATCTC CCGGGAGAATCTCTACAAATCTTCTCAGAAATCAACTTTTGTTCG
pRTL2/myc-p36	Fp29 Rp30	CATGGAACAAAAGTTGATTCTGAAGAAGATTTGGG CATGCCGCGTAGTCTGGCAGCTCGTATGGGTACCC
pRTL/Rep	Fp135 Rp572	GGCGGGCCATGGAGGGTTTGAAGGCTGAGTCTACCACAACCTGTGGG CCCGCGCCCGGTCAAGCTACGGCGGAGTCGAGGATGCTGGGC
pRTL2/p95	Fp642 Rp641	GGAATCCCTCGGTGTCAAATATGGAGCCTAGTGCCTTACC GGTAGACGCACTAGGCCTCCATATTTGACACCGAGGGATTCC
pHST/CIRV	Fp646 Rp645 Fp735 Rp734	GGAAGTTCATTTTCAATTTGGAGAGCCCTATTCTCCAGGATTCTCGACC GGTCGAGGAATCTGGAGAATAGGCCTCTCCAAATGAAATGAACCTCC GGCGGCAGGCCTAGGAAATATCTCAGGATTTGACCGTCCGGTGAGTTGCGC GCCCGCAGCACAAATAGGAACAAGTGCTGCAGCCG
pRTL2/p36-myc (<i>MluI</i>)	Fp275 Rp276	CCCGCGGATTGTGGCAAACACGCGTATTGTTACTGGTACATGTGAGG CCTCACATGTACCAGTAACAATACGCGTGTGTCACAAATCGCCGGG
pRTL2/p36-myc (<i>MluI/AvrII</i>)	Fp277 Rp278	GGCATTGCGTACGCTACCCCTCCCTAGGGAAAACTGTCTGTGTTTAGG GGCATTGCGTACGCTACCCCTCCCTAGGGAAAACTGTCTGTGTTTAGG
pRTL2/p36- <i>AvrII</i>	Fp340 Rp341	CCTCGGTGTCAAACCTAGGGGCCCTAGTGC GCACTAGGCCCTAGGTTTGACACCGAGG
pRTL2/p36 120-190-CAT	Fp331 Rp332	CCCGCGGATTGTGGCAAACCCATGGATTGTTACTGGTACATGTGAGG CCTCACATGTACCAGTAACAATCCATGGGTTTGCCACAATCGCCGGG
pRTL2/p36 120-164-CAT	Fp407 Rp408	CCACGTGTAGACATGAGTGC GCGTGAGAAAAAATCACTGGATATACC GGTATATCCAGTGATTTTTTCTCACGCGCACTCATGTCTACACGTGG
pRTL2/p36 90-164-CAT	Fp449 Rp452	CGGGCCATGGATTGGTTGGCTAAACGGGGTGTGGCTCGTGATTACCGC CCCCCCCCTAGGACGCGCACTCATGTCTACACGTGGATAAAAGTACGG
pRTL2/p36 90-190-CAT	Fp457 Rp453-2	CCCGCCCCTAGGCCTGGGGAGGGTAGCGTACGCAATGCC GGGCCCGGATCCACACGCATTGTTACTGTTACATGTGAGGTGGCAGGGG
pUC18/p36 90-190-mGFP	Fp1623 Rp1624 Fp1255 Rp1256	GCGGGCCCATGGATTGGTTGGCTAAACGGGGTGTGGC GGGGGGCCATGGGCCCTGGGGAGGGTAGCGTACGCAATGCC CGATCACATGGTCTTAAGGAGTTCGTGACCCGC GGCGGTCACGAACCTCTTAAGGACCATGTGATCG
pRTL2/p33-myc (<i>MluI</i>)	Fp273 Rp274	CCGCTGTTGAGTTATGCCACGCGTGTACGCGCAGTCTCAGTCAAGG CCTTGACTGAGACTGCGCGTACACGCGTGGCATAAATCAACAGCGG
pRTL2/p33 103-131 p36-myc	Fp1983 Rp1984 Fp2007 Rp2008	CGCGGTACGCGCAGTCTCAGTCAAGGCTTTTGGCAATGAACATATCGTT CAATGTCAGGGTGCCTAGACCATCTGTACCTAAGAAAG TCGACTTTCTTAGGTACAGATGGTCTAGGCACCCCTGACATTGAACGATA GTTTCATTGCCAAAAGCCTTGACTGAGACTGCGCGGTACA GACCATCTGACTTAAGAAAGGCATGCTCATTTGGCCTGGCG CGCCAGGCCAATGAGCATGCCTTTCTTAGGTACAGATGGTC
pRTL2/p36-myc (<i>MluI/SalI/AvrII</i>)	Fp576 Rp575	CGTACTTTTATCCACGTGTGACATGAGTGC GCGTGGCATGC GCATGCCACGCGCACTCATGTGACACGCTGGATAAAAGTACG
pRTL2/p36-myc TMD1ΔTMD2	Fp654 Rp653	GGCATGCTCATTTGGCCTGGCGCGGCTGCAGCACTGTGTTCTATTGT GCTGGCATTGCGTACGCTA CGCGTAGCGTACGCAATGCCAGCACAAATAGGAACAAGTGCTGCAGCC GCCGCCAGGCCAATGAGCATGCC
pRTL2/p36-myc TMD1ΔTMD2- <i>SalI</i>	Fp576	CGTACTTTTATCCACGTGTGACATGAGTGC GCGTGGCATGC

	Rp575	GCATGCCACGCGCACTCATGTGACACGTGGATAAAAGTACG
pRTL2/p36-myc TMD1⇌TMD2	Fp682 Rp680 Fp681 Rp679	TCGACATGAGTGCGCGTTACCGCACTGCCGTGGGGTTGG ATGGCCAACCCACGGCAGTGCAGTAACGCGCACTCATG CCATCATACCTGGTATCCCGCGATTGTGGCAAAACACACTCC CTAGGGAGTGTGTTTGCCACAATCGCCGGGATACCAGGTATG
pRTL2/p36-myc TMD1ΔsynTMD	Fp1670 Rp1672	CGCCTGGCCTTAGTGCTCGCACTAGTTTTTGGCGCTGGTCTTAGCTCTCGTACTAA CGCGTTAGTACGAGAGCTAAGACCAGCGCCAAAACTAGTGCGAGCACTAAGGCCAGGCG
pRTL2/p36-myc TMD2ΔsynTMD	Fp1674 Rp1675	TCGACATGAGTGCGCGTGGCATGTGGCCTTAGTGCTCGCACTAGTTTTG GCGTGGTCTTAGCTCTCGTACTAGCCTTGGTGTGGCAC CTAGGTGCCAGCACCAGGCTAGTACGAGAGCTAAGACCAGCGCCAAAAC TAGTGCGAGCACTAAGGCCAGCATGCCACGCGCACTCATG
pRTL2/p36-myc TMD1ΔCb5TMD	Fp1977 Rp1978	CGTGCAGTTCCTGTAGCCATTGTTGGTATATCTGTGGTTGGCTTCTTATACC TAA CGCGTTAGGTATAAGAAGCCAACAACCACAGATATACCAACAATGGCTACAG GAACGTCACG
pRTL2/p36-myc TMD2ΔCb5TMD	Fp1979 Rp1980	TCGACATGAGTGCGCGTGGAGCAGTTCCTGTAGCCATTGTTGGTATATCTG TGGTTGTTGGCTTCTTATACCTAC CTAGGTAGGTATAAGAAGCCAACAACCACAGATATACCAACAATGGCTACA GGAACGTCTCCACGCGCACTCATG
pRTL2/myc-Cb5Δp36TMD1	Fp1960 Rp1961	CTAGCACTGCCGTGGGTTGGCCATCATACCTGGTATCCCGGCGATTGTGG CAAACACACGTAAGAAGTAGT CTAGACTACTTCTTACGTGTGTTTGCCACAATCGCCGGGATACCAGGTATG ATGGCCAACCCACGGCAGTG
pRTL2/myc-Cb5Δp36TMD2	Fp1962 Rp1963	CTAGCATGTCTATTGGCCTGGCGGGCGGCTGCAGCACTTGTTCCTATTGTG CTGGCATTGGCTACGCTACCTACCTACGTAAGAAGTAGT CTAGACTACTTCTTACGTAGGGTAGCGTACGCAATGCCAGCACAATAGGA ACAAGTGCTGCAGCCGCCAGGCCAATGAGCATG
pRTL2/p36-mycΔ131-157	Fp1966 Rp1967	GGTACATGTGAGGTGGCAGGGCGTGTAGACATGAGTGCAGC CGCGCACTCATGTCTACACGCCCTGCCACCTCACATGTACC
pRTL2/p36-myc K ₉₃ K ₉₄ R ₉₈ R ₁₀₁ ΔG	Fp412 Rp410	GCTAAATATGATTGGTTGGCTGGAGGGGTGTGGCTGGTGATTACGGCAC TGCCGTGGGGTTGGCC GGCCAACCCACGGCAGTGCCGTAATCACCAGCCACACCCCTCCAGCCA ACCAATCATATTTAGC
pRTL2/p36-myc R ₁₄₄ K ₁₅₁ ΔG	Fp2048 Rp2049	CTGAACATGCTTTCTGGATTACACATGCGAGTGTAGGAGTACCGTACTTTTATCC GGATAAAAGTACGGTACTCCTACACTCGCATGTGTGAATCCAGAAAGCATGTTTCAG
pRTL2/p36-myc K ₁₃₄ K ₁₃₇ R ₁₄₄ K ₁₅₁ ΔG	Fp2098 Rp2099	GAGGTGGCAGGGGTGCTGTAGGGTGCCCGGGGCGCTGAACATGCTTTCTGGA TCCAGAAAGCATGTTACAGCCTCCGGGAGCCCTACAGCAACCCCTGCCACCTC
pSAT4/N Venus C1	Fp1905 Rp1922 Fp1941 Rp1946	CCGGCCATGGGCGGCGTGACGCTCGCCGACCAC GAGCTGCACGCGCCAGATCTGTCTCGATGTTGTG GATCTGAACAAAAGTTGATTCTGAAGAAGATCTGTCTCGAGCT ACTTGTTTTCAACTAAAGACTTCTTCTAGACAGAGC
pSAT4/N Venus N1	Fp1909 Rp1924 Fp1943 Rp1944	CCGGCCGATCCTGATGGTGAGCAAGGGCGAGGAGCTG GGCGAGCTGCACGCGCCTCTAGATTAGTCTCGATGTTGTGGCG GGGCCCGGGAAACAAAAGTTGATTCTGAAGAAGATCTGGG CGCCCGGGCCCTTGTTTTCAACTAAAGACTTCTTCTAGACCCCTAG
pSAT4/C Venus C1	Fp1907 Rp1908 Fp1942 Rp1947	CCGGGCATGGGCGGCGTGACGCTCGCCGACCAC CCGGCCAGATCTCTTGTACAGCTCGTCCATGCCGAG GATCTTACCATACGACGTGCCAGACTACGCCTCTCGAGCT AATGGGTATGCTGCACGGTCTGATGCGGAGAGC
pSAT4/C Venus N1	Fp1911 Rp1912 Fp1945 Rp1948	CCGGCCGATCCTGGGCGGCGTGACGCTCGCCGACCAC CCGGCCTCTAGATTACTTGTACAGCTCGTCCATGCCGAG CGCCCGGGCCATGGGTATGCTGCACGGTCTGATGCGGGCCCTAG GGGCCC GGGTACCCATACGACGTGCCAGACTACGCCG
pSAT4/N Venus-Tom20	Fp2088 Rp2089	CCGGCGGAATTCTATGGATACGGAACCTGAGTTCGATAG CCGGCGCCCGGATTACGAGGAGGAGACAGGCAC
pSAT4/N Venus-Tom20mut	Fp2274 Rp2275	CGAGCTCAAGCTTCGAATTCTGGCTTAGGCTCACAACCAATG CATTGGTTGTGAGCCTAAGCCAGAATTGGAAGCTTGAGCTCG
pSAT4/N Venus-Tom22	Fp2090 Rp2091	CCGGCGGAATTCTATGGCGCCTAAGAAAATCGGAGCC CCGGCGCCCGGATTAGAGCATCGCACCAGCCGGTGG

pSAT4/N Venus-Tom40	Fp2086 Rp2087	CCGGCGGAATTCTATGGCGGATCTTTACCACCTCTTAC CCGGCGCCCGGGATTAAACCACTGTTAATCCGAAACC
pSAT4/Tom40-N Venus	Fp2086 Rp2087	CCGGCGGAATTCTATGGCGGATCTTTACCACCTCTTAC CCGGCGCCCGGGATTAAACCACTGTTAATCCGAAACC
pCR2.1 TOPO/mtOM64	Fp2096 Rp2097	CCGGCGCTCGAGCATGTCGAATACGCTTTCTTTGATTCTC CCGGCGCCCGGGTATGTGTTTTCGGAGTCTCTTCTC
pSAT4/mtOM64mut-N Venus	Fp2272 Rp2273	CTCGATACAACTCTCGATCCCGGGGAACAAAAGTTGATT AATCAACTTTTGTTCCTCCGGGATCGAGAGTTGTATCGAG
pSAT4/Tim14-N Venus	Fp2129 Rp2284	CCGGCGGAATTCATGGCGACACCATTTATAGCGGGG CCGGGCCCCGGGAAAAGCGGATCCGCTGTTTTAGTTTTGCC
pSAT4/p36-N Venus	Fp2094 Rp2095	CCGGCGGAATTCATGGAGGGTTTGAAGGCTGAGTCTAC CCGGGCCCCGGGTTTGACACCGAGGGATTCTTGGAAC
pSAT4/p36-C Venus	Fp2094 Rp2095	CCGGCGGAATTCATGGAGGGTTTGAAGGCTGAGTCTAC CCGGGCCCCGGGTTTGACACCGAGGGATTCTTGGAAC
pSAT4/p33-C Venus	Fp2176 Rp2095	GCTTCGAATTCATGGAGACCATCAAGAGAATGTTTGGCCTAAG CCGGGCCCCGGGTTTGACACCGAGGGATTCTTGGAAC
pSAT4/ β ATPase-C Venus	Fp2092 Rp2093	GAATTCATGGCTTCTCGGAGGCAACAAGCCTTCAACAACGTCAATCGGC TCAACGTGG CCACGTTGAGCCGATTGACGTTGTTGAGAGGCTTGTGCTCCGAGAA GCCATGAATTC
pSAT4/porin-C Venus	Fp2130 Rp2131	CCGGCGGAATTCATGGTGAAAGGTCCCGTCTCTAC CCGGGCCCCGGGAGGCTTGAGTGCAGAGCCAATCC
pSAT4/ C Venus-Cb5	Fp1325 Rp1324	CGGGGCCATATGATGCCTACTCTACCAAATATTACAATG GGCGCCGATCCTCTAGACTACTTCTTACGTAGGTATAAGAA
pUC18/ β ATPase-GFP	FpRD1 RpRD2	GGGGGGCTAGCATGGCTTCTCGGAGGCTTCTCGCC GGGGGGCTAGCCCCGATCGAACCAGCGCCGG