

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 GGAATCCCTCGGTGTCAAATAGCCCGGGGATCCTTAGAGTCC GGACTCTAGAGGATCCCGGGCTATTGACACCGAGGGATTCC
pRTL2/p36-myc	Fp177 Rp178	CCGGCGAACAAAAGTTGATTCTGAAGAAGATTTGTAGAGATCTC CCGGGAGAATCTCTACAAATCTTCTCAGAAATCAACTTTTGTTCG
pRTL2/myc-p36	Fp29 Rp30	CATGGAACAAAAGTTGATTCTGAAGAAGATTTGGG CATGCCGGCGTAGTCTGGCACGTCGTATGGGTACCC
pRTL/Rep	Fp135 Rp572	GGCGGGCCATGGAGGGTTTGAAGGCTGAGTCTACCACAACCTGTGGG CCCGCGCCCGGTCAAGCTACGGCGGAGTCGAGGATGCTGGGC
pRTL2/p95	Fp642 Rp641	GGAATCCCTCGGTGTCAAATATGGAGCCTAGTGCCTTACC GGTAGACGCACTAGGCCTCCATATTTGACACCGAGGGATTCC
pHST/CIRV	Fp646 Rp645 Fp735 Rp734	GGAAGTTCATTTTCATTTGGAGAGCCCTATTCTCCAGGATTCCTCGACC GGTCGAGGAATCCTGGAGAATAGGCCTCTCCAAATGAAATGAACTTCC GGCGGCAGGCCTAGGAAATATCTCAGGATTTGACCGTCCGGTGAGTTGCG GCCCGCAGCACAAATAGGAACAAGTGTGCAGCCG
pRTL2/p36-myc (<i>MluI</i>)	Fp275 Rp276	CCCGCGATTGTGGCAAACACGCGTATTGTTACTGGTACATGTGAGG CCTCACATGTACCAGTAACAATACGCGTGTGGCCACAATCGCCGGG
pRTL2/p36-myc (<i>MluI/AvrII</i>)	Fp277 Rp278	GGCATTGCGTACGCTACCCTCCCTAGGGAAAACTGTCTGTGTTTAGG GGCATTGCGTACGCTACCCTCCCTAGGGAAAACTGTCTGTGTTTAGG
pRTL2/p36- <i>AvrII</i>	Fp340 Rp341	CCTCGGTGTCAAACCTAGGGCCTAGTGC GCACTAGGCCCTAGGTTTGACACCGAGG
pRTL2/p36 120-190-CAT	Fp331 Rp332	CCCGCGATTGTGGCAAACCCATGGATTGTTACTGGTACATGTGAGG CCTCACATGTACCAGTAACAATCCATGGGTTTGGCCACAATCGCCGGG
pRTL2/p36 120-164-CAT	Fp407 Rp408	CCACGTGTAGACATGAGTGCCTGAGAAAAAATCACTGGATATACC GGTATATCCAGTGATTTTTTTCTCACGCGCACTCATGTCTACACGTGG
pRTL2/p36 90-164-CAT	Fp449 Rp452	CGGGCCATGGATTGGTTGGCTAACCGGGTGTGGCTCGTATTACCGC CCCCCCCCTAGGACGCGCACTCATGTCTACACGTGGATAAAAAGTACGG
pRTL2/p36 90-190-CAT	Fp457 Rp453-2	CCCGCCCCTAGGCTGGGGAGGGTAGCGTACGCAATGCC GGGCCCGGATCCACACGCAATTGTTACTGTGTACATGTGAGGTGGCAGGGG
pUC18/p36 90-190-mGFP	Fp1623 Rp1624 Fp1255 Rp1256	GGGGCCCATGGATTGGTTGGCTAACCGGGTGTGGC GGGGGGCCATGGGCTGGGAGGGTAGCGTACGCAATGCC CGATCACATGGTCTTAAGGAGTTCGTGACCCGC GGCGGTACGAACCTCTTAAGGACCATGTGATCG
pRTL2/p33-myc (<i>MluI</i>)	Fp273 Rp274	CCGCTGTTGAGTTATGCCACGCGTGTACGCGCAGTCTCAGTCAAGG CCTTGACTGAGACTGCGCGTACACGCGTGGCATAACTCAACAGCGG
pRTL2/p33 103-131 p36-myc	Fp1983 Rp1984 Fp2007 Rp2008	CGCGTGTACGCGCAGTCTCAGTCAAGGCTTTTGGCAATGAACATATCGTT CAATGTCAGGGTGGCTAGACCATCTGTACCTAAGAAAG TCGACTTTCTTAGGTACAGATGGTCTAGGCACCCCTGACATTGAACGATA GTTCAATGCCAAAAGCCTTGACTGAGACTGCGCGTACA GACCATCTGTACTAAGAAAGGCATGCTCATTTGGCCTGGCG CGCCAGGCAATGAGCATGCCTTTCTTAGGTACAGATGGTC
pRTL2/p36-myc (<i>MluI/SalI/AvrII</i>)	Fp576 Rp575	CGTACTTTTATCCACGTGTGACATGAGTGCCTGGCATGC GCATGCCACGCGCACTCATGTGACACGTTGGATAAAAAGTACG
pRTL2/p36-myc TMD1ΔTMD2	Fp654 Rp653	GGCATGCTCATTTGGCCTGGCGCGGTGACGCACTTGTCTTATTGTT GCTGGCATTGCTACGCTA CGCGTAGCGTACGCAATGCCAGCACAAATAGGAACAAGTGTGACGCG GCCCGCAGGCAATGAGCATGCC
pRTL2/p36-myc TMD1ΔTMD2- <i>SalI</i>	Fp576	CGTACTTTTATCCACGTGTGACATGAGTGCCTGGCATGC

	Rp575	GCATGCCACGCGCACTCATGTGCGACACGTGGATAAAAGTACG
pRTL2/p36-myc TMD1⇌TMD2	Fp682 Rp680 Fp681 Rp679	TCGACATGAGTGGCGTTACCGCACTGCCGTGGGGTTGG ATGGCCAACCCACGGCAGTGGCGTAACGCGCACTCATG CCATCATACCTGGTATCCCAGCGATTGTGGCAAACACACTCC CTAGGGAGTGTGTTGCCACAATCGCCGGATACCAGGTATG
pRTL2/p36-myc TMD1ΔsynTMD	Fp1670 Rp1672	CGCCTGGCCTTAGTGTGCTGCACTAGTTTTGGCGTGGTCTTAGCTCTCGTACTAA CGCGTTAGTACGAGAGCTAAGACCAGCGCCAAAACTAGTGGCAGCACTAAGGCCAGCGC
pRTL2/p36-myc TMD2ΔsynTMD	Fp1674 Rp1675	TCGACATGAGTGGCGTGGCATGTGCGCCTTAGTGTGCGCACTAGTTTTG GCGTGGTCTTAGCTCTCGTACTAGCCTTGGTGTGGCAC CTAGGTGCCAGCACCAGGCTAGTACGAGAGCTAAGACCAGCGCCAAAAC TAGTGGCAGCACTAAGGCCAGCATGCCACGCGCACTCATG
pRTL2/p36-myc TMD1ΔCb5TMD	Fp1977 Rp1978	CGTGCAGTTCCTGTAGCCATTGTTGGTATATCTGTGGTTGGCTTCTTATACC TAA CGCGTTAGGTATAAGAAGCCACAACACAGATATACCAACAATGGCTACAG GAACTGCACG
pRTL2/p36-myc TMD2ΔCb5TMD	Fp1979 Rp1980	TCGACATGAGTGGCGTGGAGCAGTTCCTGTAGCCATTGTTGGTATATCTG TGGTGTGGCTTCTTATACCTAC CTAGGTAGGTATAAGAAGCCACAACACAGATATACCAACAATGGCTACA GGAATGCTCCACGCGCACTCATG
pRTL2/myc-Cb5Δp36TMD1	Fp1960 Rp1961	CTAGCACTGGCGTGGGTTGGCCATCATACCTGGTATCCCAGCGATTGTTGG CAAACACACGTAAGAAGTAGT CTAGACTACTTCTTACGTGTGTTTGGCACAATCGCCGGGATACCAGGTATG ATGGCCAACCCACGGCAGTG
pRTL2/myc-Cb5Δp36TMD2	Fp1962 Rp1963	CTAGCATGTCTATGGCCTGGCGGGCTGCAGCACTTGTTCCTATTGTTGG CTGGCATTGGCTACGCTACCCTACGTAAGAAGTAGT CTAGACTACTTCTTACGTAGGTAGCGTACGCAATGCCAGCACAATAGGA ACAAGTGTGCAGCCGCGCCAGGCCAATGAGCATG
pRTL2/p36-mycΔ131-157	Fp1966 Rp1967	GGTACATGTGAGGTGGCAGGGCGTGTAGACATGAGTGGCGG CGCGCACTCATGTCTACACGCCCTGCCACCTCACATGTACC
pRTL2/p36-myc K ₉₃ K ₉₄ R ₉₈ R ₁₀₁ ΔG	Fp412 Rp410	GCTAAATATGATGGTTGGCTGGAGGGGTGTGGTGGTATTACGGCAC TGCCGTGGGGTTGGCC GGCCAACCCACGGCAGTGGCGTAATCACCAGCCACACCCCTCCAGCCA ACCAATCATATTTAGC
pRTL2/p36-myc R ₁₄₄ K ₁₅₁ ΔG	Fp2048 Rp2049	CTGAACATGCTTTCTGGATTACACATGCGAGTGTAGGAGTACCGTACTTTTATCC GGATAAAAGTACGGTACTCTTACACTCGCATGTGTGAATCCAGAAAGCATGTTCCAG
pRTL2/p36-myc K ₁₃₄ K ₁₃₇ R ₁₄₄ K ₁₅₁ ΔG	Fp2098 Rp2099	GAGGTGGCAGGGGTGCTGTAGGGCTGCCGGGGCGCTGAACATGCTTTCTGGA TCCAGAAAGCATGTTACAGCCCGGGCAGCCCTACAGAACCCCTGCCACCTC
pSAT4/N Venus C1	Fp1905 Rp1922 Fp1941 Rp1946	CCGGCCATGGGCGCGTGCAGCTCGCCGACCAC GAGCTGCACGCGCCAGATCTGTCTCGATGTTGTG GATCTGAACAAAAGTTGATTTCTGAAGAAGATCTGTCTCGAGCT ACTTGTTTTCAACTAAAGACTTCTTCTAGACAGAGC
pSAT4/N Venus N1	Fp1909 Rp1924 Fp1943 Rp1944	CCGGCCGATCCTGATGGTGAAGGCGAGGAGCTG GGCGAGTGCACGCGCCTTAGATTAGTCTTCCGATGTTGTGGCG GGGCCGGGGAACAAAAGTTGATTTCTGAAGAAGATCTGGG CGCCCGGGCCCTTGTTTTCAACTAAAGACTTCTTCTAGACCCCTAG
pSAT4/C Venus C1	Fp1907 Rp1908 Fp1942 Rp1947	CCGGCATGGGCGGCTGCAGCTCGCCGACCAC CCGGCAGATCTCTTGTACAGCTCGTCCATGCCGAG GATCTTACCATACGACGTGCCAGACTACGCCCTCTCGAGCT AATGGGTATGCTGCACGGTCTGATGCCGAGAGC
pSAT4/C Venus N1	Fp1911 Rp1912 Fp1945 Rp1948	CCGGCCGATCCTGGGCGGCTGCAGCTCGCCGACCAC CCGGCCTTAGATTACTTGTACAGCTCGTCCATGCCGAG CGCCCGGGCCATGGGTATGCTGCACGGTCTGATCGGGCCCTAG GGGCCGGGTACCATACGACGTGCCAGACTACGCCGG
pSAT4/N Venus-Tom20	Fp2088 Rp2089	CCGGCGGAATTTCTATGGATACGGAAACTGAGTTTCGATAG CCGGCGCCGGGATTAACGAGGAGGAGACAGGCAC
pSAT4/N Venus-Tom20mut	Fp2274 Rp2275	CGAGCTCAAGCTTCGAATTTGGCTTAGGCTCACAACCAATG CATTGGTTGTGAGCCTAAGCCAGAATTCGAAGCTTGTAGCTCG
pSAT4/N Venus-Tom22	Fp2090 Rp2091	CCGGCGGAATTTCTATGGCGCCTAAGAAAATCGGAGCC CCGGCGCCGGGATTAGAGCATCGCACCGACCGGTGG

pSAT4/N Venus-Tom40	Fp2086 Rp2087	CCGGCGGAATTCATGGCGGATCTTTACCACCTCTTAC CCGGCGCCCGGGATTAACCAACTGTTAATCCGAAACC
pSAT4/Tom40-N Venus	Fp2086 Rp2087	CCGGCGGAATTCATGGCGGATCTTTACCACCTCTTAC CCGGCGCCCGGGATTAACCAACTGTTAATCCGAAACC
pCR2.1 TOPO/mtOM64	Fp2096 Rp2097	CCGGCGCTCGAGCATGTCGAATACGCTTTCTTTGATC CCGGCGCCCGGTATGTGTTTTTCGGAGTCTCTTCTC
pSAT4/mtOM64mut-N Venus	Fp2272 Rp2273	CTCGATACAACCTCTCGATCCCGGGGAACAAAAGTTGATT AATCAACTTTTGTTCCTCCGGGATCGAGAGTTGTATCGAG
pSAT4/Tim14-N Venus	Fp2129 Rp2284	CCGGCGGAATTCATGGCGACACCATTATAGCGGGG CCGGGCCCGGGAAAAGCGGATCCGCTGTTTTTAGTTTTGCC
pSAT4/p36-N Venus	Fp2094 Rp2095	CCGGCGGAATTCATGGAGGTTTGAAGGCTGAGCTAC CCGGGCCCGGGTTGACACCGAGGATTCCTGGGAAC
pSAT4/p36-C Venus	Fp2094 Rp2095	CCGGCGGAATTCATGGAGGTTTGAAGGCTGAGCTAC CCGGGCCCGGGTTGACACCGAGGATTCCTGGGAAC
pSAT4/p33-C Venus	Fp2176 Rp2095	GCTTCGAATTCATGGAGACCATCAAGAGAATGATTTGGCCTAAG CCGGGCCCGGGTTGACACCGAGGATTCCTGGGAAC
pSAT4/ β ATPase-C Venus	Fp2092 Rp2093	GAATTCATGGCTTCTCGGAGGCAACAAGCCTTCAACAACGTCAATCGGC TCAACGTGG CCACGTTGAGCCGATTGACGTTGTTGAGAGGTTGTTGCCTCCGAGAA GCCATGAATTC
pSAT4/porin-C Venus	Fp2130 Rp2131	CCGGCGGAATTCATGGTGAAGGTCCCGGTCTCTAC CCGGGCCCGGGAGGCTTGAGTGCAGAGCCAATCC
pSAT4/ C Venus-Cb5	Fp1325 Rp1324	CGGGCCATATGATGCCACTCTCACCAACTATTACAATG GGCGCCGATCCTCTAGACTACTTCTTACGTAGGTATAAGAA
pUC18/ β ATPase-GFP	FpRD1 RpRD2	GGGGGGCTAGCATGGCTTCTCGGAGGCTTCTCGCC GGGGGGCTAGCCCCGATCGAACCAGCGCCGG