

Table S1. Oligonucleotides used in this study

#	Name	Sequence (5'-3')
1	MLV-IN Ct_F	GATCTGGCGGACCCAGCAGTAGACTGACATGGCGGGTGCAGCGGAGCC AGAACCCCTGAAGATCCGGCTGACCAGAGAGGCCCCCTAAA
2	MLV-IN Ct_R	TCGATTTAGGGGGCCTCTCTGGTCAGCCGGATCTTCAGGGGGTTCTGGCT CCGCTGCACCCGCCATGTTCAGTCTACTGCTGGGTCCGCCA
3	MLV-IN Ct W390A/R391A/R394A_F	GATCTGGCGGACCCAGCAGTAGACTGACCGCGGGTGCAGGCGAGCC AGAACCCCTGAAGATCCGGCTGACCAGAGAGGCCCCCTAAA
4	MLV-IN Ct W390A/R391A/R394A_R	TCGATTTAGGGGGCCTCTCTGGTCAGCCGGATCTTCAGGGGGTTCTGGCT CGCTGCACCCGCCGCTGTCAGTCTACTGCTGGGTCCGCCA
5	MLV-IN Ct K400A/R402A/R405A_F	GATCTGGCGGACCCAGCAGTAGACTGACATGGCGGGTGCAGCGGAGCC AGAACCCCTGGCGATCGCGCTGACCAGAGAGGCCCCCTAAA
6	MLV-IN Ct K400A/R402A/R405A_R	TCGATTTAGGGGGCCTCCGCGGTGACGCGATCGCCAGGGGGTTCTGGC TCCGCTGCACCCGCCATGTTCAGTCTACTGCTGGGTCCGCCA
7	MLV-IN Ct W390A_F	GATCTGGCGGACCCAGCAGTCGACTGACAGCGGGTGCAGCGGAGCC AGAACCCCTGAAGATCCGGCTGACCAGAGAGGCCCCCTAAA
8	MLV-IN Ct W390A_R	TCGATTTAGGGGGCCTCTCTGGTCAGCCGGATCTTCAGGGGGTTCTGGCT CCGCTGCACCCGCGCTGTCAGTCGACTGCTGGGTCCGCCA
9	MLV-IN Ct R391A_F	GATCTGGCGGACCCAGCAGTCGACTGACATGGCGGGTGCAGCGGAGCC AGAACCCCTGAAGATCCGGCTGACCAGAGAGGCCCCCTAAA
10	MLV-IN Ct R391A_R	TCGATTTAGGGGGCCTCTCTGGTCAGCCGGATCTTCAGGGGGTTCTGGCT CCGCTGCACCCGCCATGTTCAGTCGACTGCTGGGTCCGCCA
11	MLV-IN Ct R394A_F	GATCTGGCGGACCCAGCAGTCGACTGACATGGCGGGTGCAGGCGAGCC AGAACCCCTGAAGATCCGGCTGACCAGAGAGGCCCCCTAATAAA
12	MLV-IN Ct R394A_R	TCGATTTAGGGGGCCTCTCTGGTCAGCCGGATCTTCAGGGGGTTCTGGCT CGCTGCACCCGCCATGTTCAGTCGACTGCTGGGTCCGCCA
13	MLV-IN Ct K400A_F	GATCTGGCGGACCCAGCAGTAGACTGACATGGCGGGTGCAGCGGAGCC AGAACCCCTGGCGATCCGGCTGACCCGAGAGGCCCCCTAAA
14	MLV-IN Ct K400A_R	TCGATTTAGGGGGCCTCTCGGGTCAGCCGGATCGCCAGGGGGTTCTGGC TCCGCTGCACCCGCCATGTTCAGTCTACTGCTGGGTCCGCCA
15	MLV-IN Ct R402A_F	GATCTGGCGGACCCAGCAGTAGACTGACATGGCGGGTGCAGCGGAGCC AGAACCCCTGAAGATCGCGCTGACCCGAGAGGCCCCCTAAA
16	MLV-IN Ct R402A_R	TCGATTTAGGGGGCCTCTCGGGTCAGCGGATCTTCAGGGGGTTCTGGC TCCGCTGCACCCGCCATGTTCAGTCTACTGCTGGGTCCGCCA
17	MLV-IN-Ct R405A_F	GATCTGGCGGACCCAGCAGTAGACTGACATGGCGGGTGCAGCGGAGCC AGAACCCCTGAAGATCCGGCTGACCCGCGAGGCCCCCTAAA
18	MLV-IN-Ct R405A_R	TCGATTTAGGGGGCCTCCGCGGTGACCCGGATCTTCAGGGGGTTCTGGC TCCGCTGCACCCGCCATGTTCAGTCTACTGCTGGGTCCGCCA
19	pET_MLV-IN W390A_F	CCGGGGGTGGACCATCTCTAGACTGACAGCGCGGTTCAACGCTCTCA AAACCCCTTAAAAATAAGATTAACCCGCGAGGCCCCCG
20	pET_MLV-IN W390A_R	TCGACGGGGCCTCGCGGGTAACTTATTTTAAAGGGGTTTTGAGAGC GTTGAACGCGCGCTGTTCAGTCTAGAGGATGGTCCACCC
21	pET_MLV-IN 1-380_F	CCGGGGCAGCAGCAGCGG
22	pET_MLV-IN 1-380_R	TCGACCGCTGCTGCTGCC
23	MLV IN Core Mut F1	CACCCCGCCCTTGTA
24	MLV IN Core Mut R1	TATGGGGTGAGGCCATGG
25	MLV IN Core E266A F2	TGCGATCTTATATGGGGCACCCCGCCCTTGTA
26	MLV IN Core E266A R2	CCCATATAAGATCGCATATGGGGTGAGGCCATGG

27	MLV IN Core L268A F2	CGAGATCGCATATGGGGCACCCCCGCCCTTGTA
28	MLV IN Core L268A R2	CCCCATATGCGATCTCGTATGGGGTGAGGCCATGG
29	MLV IN Core Y269A F2	CGAGATCTTAGCTGGGGCACCCCCGCCCTTGTA
30	MLV IN Core Y269A R2	CCCCAGCTAAGATCTCGTATGGGGTGAGGCCATGG
31	Gagpol FII NheI	TTTTGCTAGCATGGGCCAGACTGTTACCAC
32	Gagpol R Eco	ATTAGAATTCGATACTGACCCCTCTG
33	MLV IN W391A F I	TTCAACGCTCTCAAAACCCC
34	MLV IN W391A F II	CTCAAGACTGACAGCGCGCG TTCAACGCTCTCAAAACCCC
35	MLV IN W391A R I	GATGGTCCACCCCCGG
36	MLV IN W391A R II	CGCGCGCTGTCAGTCTTGAGGATGGTCCACCCCCGG
37	MLV IN dC F I	TAATCCCCTTAATTCTTCTGATGCTC
38	MLV IN dC F II	CCCGGGCTTAATTAATCCCCTTAATTCTTCTGATGCTC
39	MLV IN dC R I	ATTAAGCCCGGGGTCGGCAGCCTTCACG
40	MLV IN dC R II	GTCGGCAGCCTTCACG
41	eGFP-RT1_F	GGAGCGCACCATCTTCTTCA
42	eGFP-RT1_R	AGGGGTGTCGCCCTCGAA
43	eGFP-RT	GCTACAAGACCCGCGCCGAGG