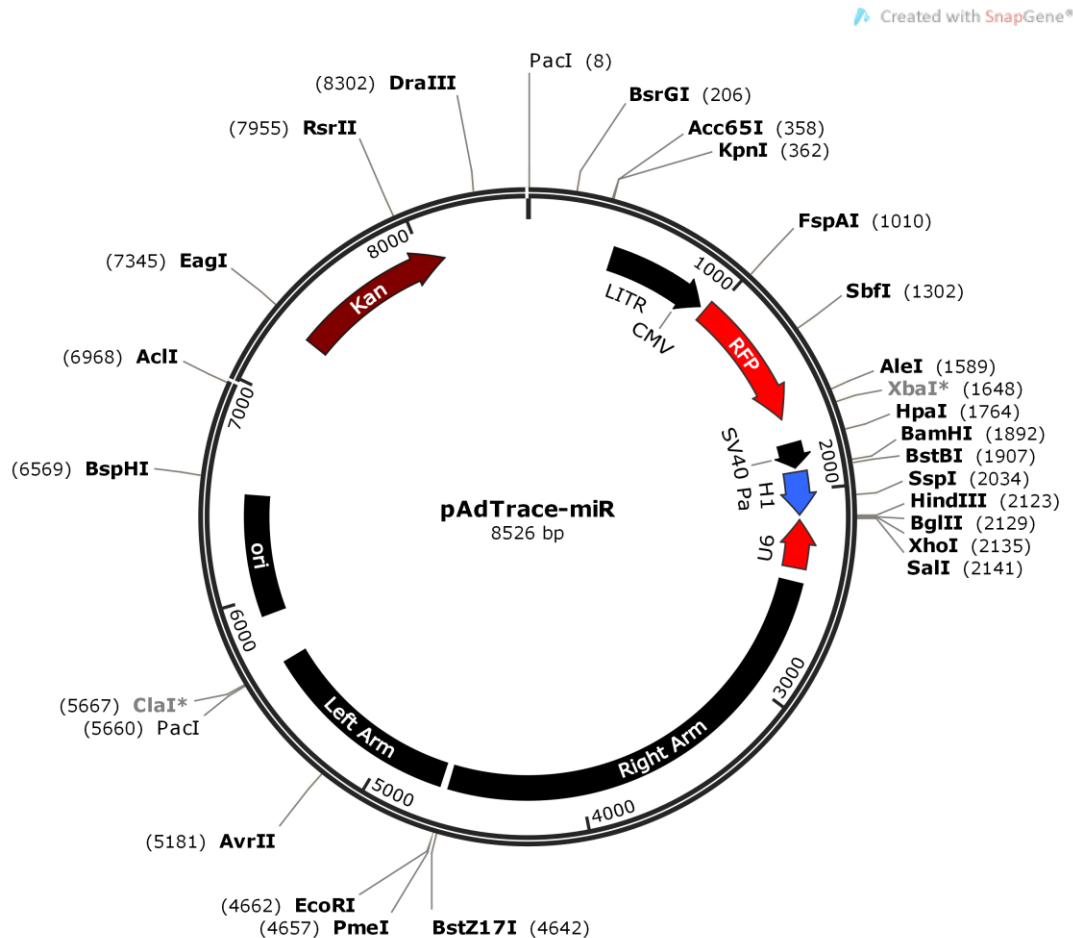


Vector: pAdTrace-miR (mature microRNA expression vector)

Antibiotic Selection: Kan

Creator(s): Wenwen Zhang & Shujuan Yan at Molecular Oncology Laboratory, The University of Chicago Medical Center

Date of Construction: November, 2016



Design of miR Oligo Cassette



Example :

5p: TGAGGTAGTAGGTTGTATAGTT	3p: CTATACAATCTACTGTCTTTCC	mmu-let-7a-1
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TCGA TGAGGTAGTAGGTTGTATAGTT ttttttaaaaaGGAAAGACAGTAGATTGTATAG
 ACTCCATCATCCAACATATCAAaaaaattttt CCTTTCTGTCATCTAACATATCTCGA

AGCT CTATACAATCTACTGTCTTTCC ttttttaaaaaAACTATACAACCTACTACCTCA

CCATCCAGTCTATTAATGTTGCCGGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGGCGAACGTTGTTGNNNNNNAAAAAGGATCTTCACCTAGATC
 CTTTTACGTAGAAAGCCAGTCCGCAGAAACGGTGTGACCCCGGATGAATGTGACTACTGGGCTATCTGGACAAGGGAAAACGCAAGCGCAAAGAGAAAGC
 AGGTAGCTTGCAGTGGGCTTACATGGCGATAGCTAGACTGGGCGGTTTTATGGACAGCAAGCGAACCGGAATTGCCAGCTGGGGCCCTCTGGTAAGGTTGG
 GAAGCCCTGCAAAGTAAACTGGATGGCTTTCTCGCCGCCAAGGATCTGATGGCGCAGGGGATCAAGCTCTGATCAAGAGACAGGATGAGGATCGTTTCGCATG
 ATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTGCGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCG
 TGTCCGGCTGTGAGCGCAGGGGCGCCCGTCTTTTTGTCAAGACCGACCTGTCCGGTGCCTGAATGAACTGCAAGACGAGGCAGCGCGCTATCGTGGCT
 GGCCACGACGGGCGTTCTTTCGCGAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTGGTGTCTATTGGGCGAAGTGCAGGGGCGAGGATCTCCTGTCA
 TCTCACCTTGTCTCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGTATCCGGCTACCTGCCCATTCGACCACCAAGCGAAAC
 ATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTGCGATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGAACTGTTCGCCAG
 GCTCAAGGCGAGCATGCCGACGGCGAGGATCTCGTCTGACCCATGGCGATGCCTGTTCGCCAATATCATGGTGGAAAAATGGCCGCTTTTCTGGATTTCATC
 GACTGTGGCCGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGGAATGGGCTGACCGCTTCTCTCG
 TGCTTTACGGTATCGCCGCTCCCGATTCGACGCGCATCGCCTTCTATCGCCTTCTGACGAGTTCTTCTGAATTTGTTAAAAATTTTGTAAATCAGCTCAT
 TTTTAAACCAATAGGCCGAAATCGGCAACATCCCTTATAAATCAAAAGAATAGACCCGCGATAGGGTTGAGTGTGTTCCAGTTTGGAAACAAGAGTCCACTATT
 AAAGAACGTGGACTCCAACGTTCAAAGGGCGAAAAACCGTATCAGGGCGATGGCCCATACGTGAACCATCACCCAAATCAAGTTTTTTGCGGTGAGGTTGC
 CGTAAAGCTCTAAATCGGAACCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGAAAGCCGCGCAACGTTGGCGAGAAAGGAAGGAAGCAAGGAAAGGAG
 CGGGCGCTAGGGCGTGGCAAGTGTAGCGGTACGCTGCGCGTAACCACCACACCCGCGCGCTTAATGCGCCGNNNNNN

Unique enzymes in pAdTrace-miR vector:

Spe I	A`CTAG,T	660
BstE II	G`GTNAC,C	1087
BsrG I	T`GTAC,A	1282
EcoR I	G`AATT,C	1404
Nco I	C`CATG,G	1475
Bbv II	GAAGAC 7/11	1561
Bbs I	GAAGAC 8/12	1562
Bsg I	GTGCAG 22/20	1664
Nru I	TCG CGA	1708
BsaB I	GATNN NNATC	1775
Pme I	CTTT AAAC	1879
BsiC I	TT`CG,AA	1892
BstB I	TT`CG,AA	1892
Bsp120 I	G`GGCC,C	1930
Apa I	G,GGCC`C	1934
HinD III	A`AGCT,T	2106
Bgl II	A`GATC,T	2112
PaeR7 I	C`TCGA,G	2118
Xho I	C`TCGA,G	2118
Sal I	G`TCGA,C	2124
Acc I	GT`MK,AC	2125
BsaA I	YAC GTR	2257
Afl III	A`CRYG,T	3461
Sca I	AGT ACT	4834
Sph I	G,CATG`C	5749

Number of enzymes = 25

The following enzymes do not cut pAdTrace-miR vector:

Age I	Avr II	BamH I	Bcl I	Blp I
BsiW I	Bsm I	Bsp1286 I	BspM I	BspM II
Bst1107 I	BstX I	Cla I	Dra III	Eco72 I
Esp I	Fse I	Hpa I	Mlu I	Mun I
Not I	Nsi I	PflM I	Pml I	Rsr II
Sac II	Sfi I	SnaB I	Spl I	Srf I