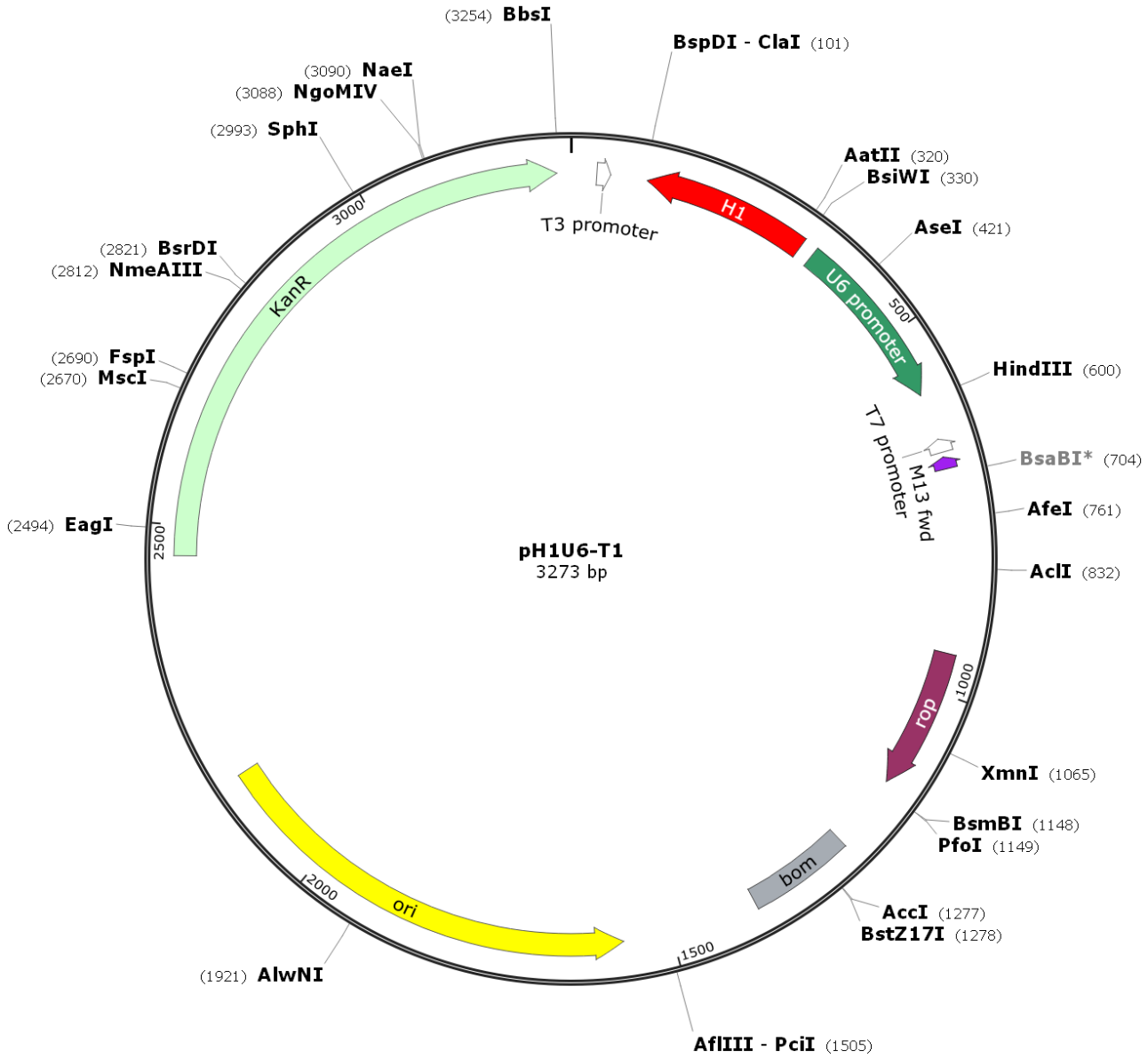
Vector: **pH1U6-T1** [FAMSi PCR template-1]

Antibiotic Selection: Kan

Creator(s): Fang He, Zongyue Zeng, Alex Li, Ben Luu & Alissa Li @ Molecular Oncology Lab of The University of Chicago Medical Center

Date of Construction: August 2019



pH1U6-T1 (Template-1) Full-length Sequence

GGAAACAGCTATGACCATGATTACGCCAAGCTCGAAATTAACCCTCACTAAAGGGAACAAAAGCTGGTACGAGGA
CAGGCTGGAGCCATGGCTGGTGACATCGATttttttAGAGTGGTCTCATACAGAACTTATAAGATTCCCAAATCCA
AAGACATTTCACGTTTATGGTGATTTCCCAGAACACATAGCGACATGCAAATATTGCAGGGCGCCACTCCCCTGT
CCCTCACAGCCATCTTCCTGCCAGGGCGCACGCGCGCTGGGTGTTCCCGCCTAGTGACACTGGGCCCGCGATTCC
TTGGAGCGGGTTGATGACGTCAGCGTTCGCGTACGAAGGTCGGGCAGGAAGAGGGCCTATTTCCCATGATTCCTT
CATATTTGCATATACGATACAAGGCTGTTAGAGAGATAATTAGAATTAATTTGACTGTAAACACAAAGATATTAG
TACAAAATACGTGACGTAGAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTTAAAATTATGTTTTAAAATGGACT
ATCATATGCTTACCGTAACTTGAAAGTATTTCGATTTCTTGGCTTTATATATCTTGTGGAAAGGACGAAaaaaaAA
AGCTTGCCTAATCGGACGAAAAAATGACCATGATTACGCCAAGCTCCAATTCGCCCTATAGTGAGTCGTATTACA
ATTCACTGGCCGTCGTTTTACCCGGATCTGCATCGCAGGATGCTGCTGGCTACCCTGTGGAACACCTACATCTGT
ATTAACGAAGCGCTGGCATTGACCCTGAGTGATTTTTCTCTGGTCCCGCCGCATCCATACCGCCAGTTGTTTACC
CTCACAACGTTCCAGTAACCGGGCATGTTCATCATCAGTAACCCGTATCGTGAGCATCCTCTCTCGTTTCATCGG
TATCATTACCCCCATGAACAGAAATCCCCCTTACACGGAGGCATCAGTGACCAAACAGGAAAAAACCGCCCTTAA
CATGGCCCGCTTTATCAGAAGCCAGACATTAACGCTTCTGGAGAAACTCAACGAGCTGGACGCGGATGAACAGGC
AGACATCTGTGAATCGCTTCACGACCACGCTGATGAGCTTTACCGCAGCTGCCTCGCGCGTTTCGGTGATGACGG
TGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGACAAGC
CCGTCAGGGCGCGTCAGCGGGTGTTGGCGGGTGTCGGGGCGCAGCCATGACCCAGTCACGTAGCGATAGCGGAGT
GTATACTGGCTTAACTATGCGGCATCAGAGCAGATTGTACTGAGAGTGCACCATATGCGGTGTGAAATACCGCAC
AGATGCGTAAGGAGAAAATACCGCATCAGGCGCTCTTCCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTCGTT
CGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGA
AAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGG
CTCCGCCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGA
TACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCC
GCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTT
CGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTT
GAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTAT
GTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGC
GCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGC
GGTGGTTTTTTTGTTTGCAAGCAGCAGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCT
ACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTC
ACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGT
TACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCC
GTCATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAATAATATATGATTGAACAAGATG
GATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCT
GCTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTG
CCCTGAATGAACTGCAAGACGAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGC
TCGACGTTGTCACTGAAGCGGGAAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTC
ACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCT
GCCCATTCGACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGG
ATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGAACTGTTCGCCAGGCTCAAGGCGAGCATGCCCGACG
GCGAGGATCTCGTCGTGACCCATGGCGATGCCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGAT
TCATCGACTGTGGCCGGCTGGGTGTGGCtGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAG
AGCTTGGCGGCGAATGGGCTGACCGCTTCCTCGTGCTTTACGGTATCGCCGCTCCCGATTCGCAGCGCATCGCCT
TCTATCGCCTTCTTGACGAGTTCTTCTGACCTTTCGTCTTCAAGaatt

Zero-Cutters :

#	Enzyme	Specificity
1	Acc65I	GGTACC
2	AflII	CTTAAG
3	AgeI	ACCGGT
4	AleI	CACNNNNGTG
5	ApoI	RAATTY
6	AscI	GGCGCGCC
7	AsiSI	GCGATCGC
8	AvaI	CYCGRG
9	AvrII	CCTAGG
10	BaeI	(N)5(N)10ACNNNNGTAYC(N)7(N)5
11	BamHI	GGATCC
12	BbvCI	CCTCAGC
13	BclI	TGATCA
14	BglI	GCCNNNNNGGC
15	BglII	AGATCT
16	BlpI	GCTNAGC
17	BmgBI	CACGTC
18	BmtI	GCTAGC
19	Bpu10I	CCTNAGC
20	BsaXI	NNN(N)9AC(N)5CTCC(N)7NNN
21	BseRI	GAGGAG(N)8NN
22	BsgI	GTGCAG(N)14NN
23	BsmI	GAATGCN
24	BsoBI	CYCGRG
25	BspEI	TCCGGA
26	BsrGI	TGTACA
27	BstBI	TTCGAA
28	BstEII	GGTNACC
29	BstXI	CCANNNNNNTGG
30	Bsu36I	CCTNAGG
31	BtsI	GCAGTGNN
32	CspCI	NN(N)11CAA(N)5GTGG(N)10NN
33	DraIII	CACNNNGTG
34	Eco53kI	GAGCTC
35	EcoNI	CCTNNNNNAGG
36	EcoRI	GAATTC
37	EcoRV	GATATC
38	FseI	GGCCGGCC
39	HincII	GTYRAC
40	HpaI	GTTAAC
41	KpnI	GGTACC
42	MfeI	CAATTG
43	MluI	ACGCGT
44	NheI	GCTAGC
45	NotI	GCGGCCGC
46	NruI	TCGCGA
47	NsiI	ATGCAT
48	PacI	TTAATTAA
49	PaeR7I	CTCGAG
50	PflMI	CCANNNNNTGG
51	PmeI	GTTTAAAC
52	PmlI	CACGTG
53	PpuMI	RGGWCCY
54	PshAI	GACNNNNGTC
55	PspXI	VCTCGAGB
56	PstI	CTGCAG
57	PvuI	CGATCG
58	RsrII	CGGWCCG
59	SacI	GAGCTC
60	SacII	CCGCGG
61	SalI	GTCGAC
62	SbfI	CCTGCAGG
63	ScaI	AGTACT
64	SexAI	ACCWGGT
65	SfiI	GGCCNNNNNGGCC
66	SgrAI	CRCCGGYG
67	SmaI	CCCGGG
68	SnaBI	TACGTA
69	SpeI	ACTAGT
70	SrfI	GCCCGGGC
71	StuI	AGGCCT
72	SwaI	ATTTAAAT
73	TspMI	CCCGGG
74	XbaI	TCTAGA
75	XcmI	CCANNNNNNNNNTGG
76	XhoI	CTCGAG
77	XmaI	CCCGGG

One-Cutters :

#	Enzyme	Specificity	Sites & flanks	Cut positions (blunt - 5' ext. - 3' ext.)
1	AatII	G▲ACGT C	list	*320/316
2	AccI	GT MK▲AC	list	1277/1279
3	AclI	AA CG▲TT	list	*832/834
4	AfeI	AGC▲GCT	list	*761
5	AflIII	A CRYG▲T	list	1505/1509
6	AlwNI	CAG▲NNN CTG	list	1921/1918
7	ApaI	G▲GGCC C	list	*291/287
8	AseI	AT TA▲AT	list	421/423
9	AvaII	G GWC▲C	list	792/795
10	BbsI	GAAGACNN NNNN▲	list	3254/3258
11	BcgI	▲NN $(N)_{10}$CGA$(N)_6$TGC$(N)_{10}$▲NN	list	*1084/1082+1118/1116
12	BsaBI	GATNN▲NNATC	list	*#704
13	BsaI	GGTCTCN NNNN▲	list	122/126
14	BsiWI	C GTAC▲G	list	*330/334
15	BsmBI	CGTCTCN NNNN▲	list	*1148/1152
16	BspDI	AT CG▲AT	list	*101/103
17	BsrDI	GCAATG▲NN	list	2821/2819
18	BssHII	G CGCG▲C	list	*257/261
19	BstZ17I	GTA▲TAC	list	1278
20	ClaI	AT CG▲AT	list	*101/103
21	EagI	C GGCC▲G	list	*2494/2498
22	EcoO109I	RG GNC▲CY	list	353/356
23	Esp3I	CGTCTCN NNNN▲	list	*1148/1152
24	FspI	TGC▲GCA	list	*2690
25	HindIII	A AGCT▲T	list	600/604
26	MscI	TGG▲CCA	list	2670
27	NaeI	GCC▲GGC	list	*3090
28	NgoMIV	G CCGG▲C	list	*3088/3092
29	NmeAIII	GCCGAG$(N)_{19}$▲NN	list	2813/2811
30	PciI	A CATG▲T	list	1505/1509
31	PsiI	TTA▲TAA	list	133
32	PspOMI	G GGCC▲C	list	*287/291
33	SphI	G▲CATG C	list	2993/2989
34	SspI	AAT▲ATT	list	202
35	XmnI	GAANN▲NNTTC	list	1065
36	ZraI	GAC▲GTC	list	*318