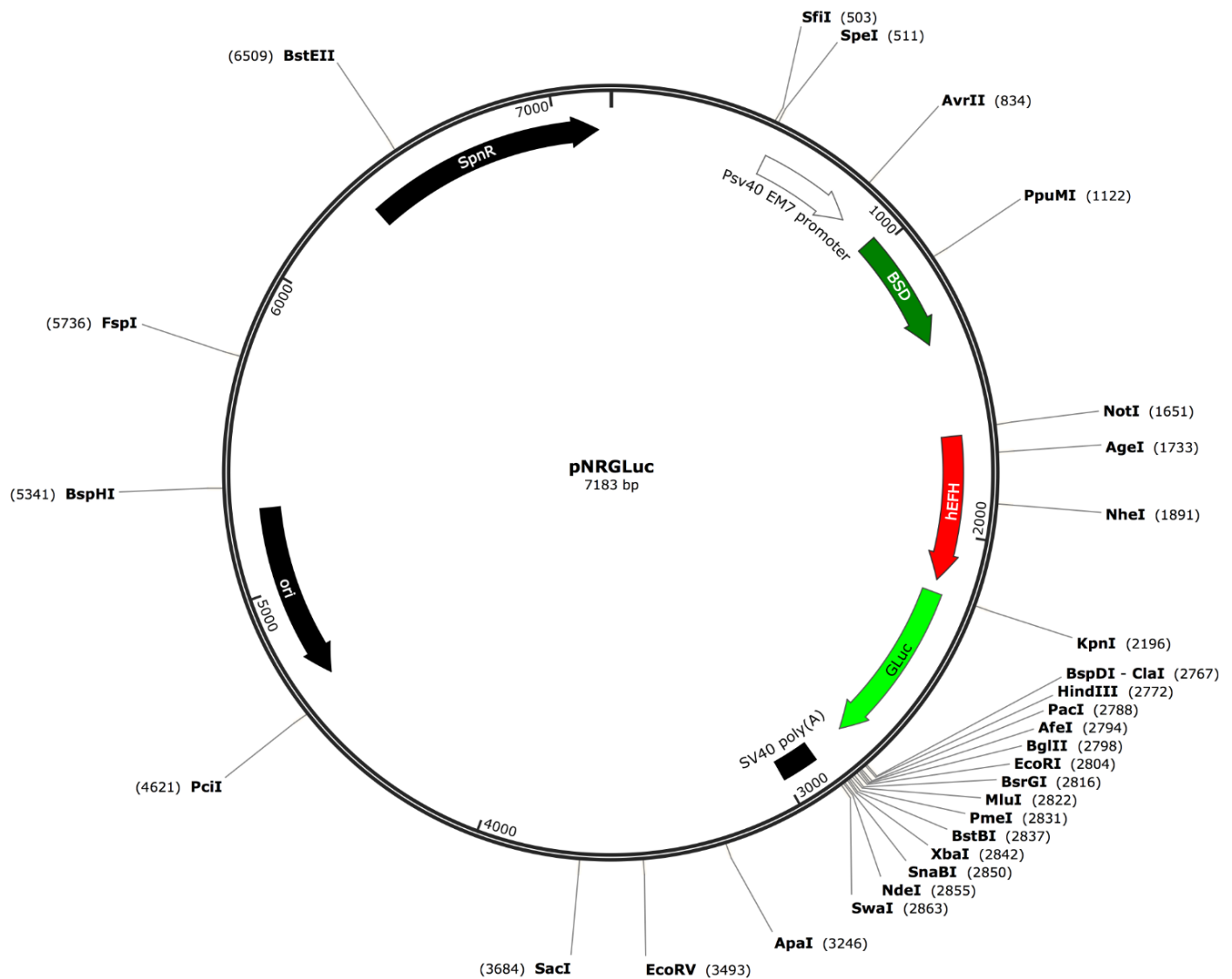


Vector: pNRGLuc (piggyBac vector-based noncoding RNA targeting transcript GLuc reporter)

Antibiotic Selection: Spectinomycin or Blastacin-resistant

Creator(s): Junyi Liao, MD, PhD, Molecular Oncology Laboratory of The University of Chicago

Date of Construction: July, 2016 (map generated by Shujuan Yan, MD, PhD)



PNRGLuc Reporter Vector Sequence (Spectinomycin-resistant)

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Enzymes that don't cut

#	Enzyme	Specificity
1	AatII	G↓ACGT↓C
2	AflIII	C↓TTAA↓G
3	AleI	CACNN↓NNGTG
4	AscI	GG↓CGCG↓CC
5	AsiSI	GCG↓AT↓CGC
6	BaeI	↓(N) ₅ (N) ₁₀ ACNNNNGTAYC(N) ₇ ↓(N) ₅ ↓
7	BamHI	G↓GATC↓C
8	BbvCI	CC↓TCA↓GC
9	BmgBI	CAC↓GTC
10	BsmBI	CGTCTCN↓NNNN↓
11	BstZ17I	GTA↓TAC

12	FseI	GG↓CCGG↓CC
13	HpaI	GTT↓AAC
14	PflFI	GACN↓N↓NGTC
15	PflMI	CCAN↓NN↓NTGG
16	PshAI	GACNN↓NNGTC
17	SbfI	CC↓TGCA↓GG
18	ScaI	AGT↓ACT
19	SgrAI	CR↓CCGG↓YG
20	Tth111I	GACN↓N↓NGTC
21	XcmI	CCANNNN↓N↓NNNNTGG
22	ZraI	GAC↓GTC

Single cutters

#	Enzyme	Specificity	Sites & flanks	Cut positions (blunt - 5' ext. - 3' ext.)
1	Acc65I	G↓GTAC↓C	list	*2192/2196
2	AfeI	AGC↓GCT	list	*2794
3	AgeI	A↓CCGG↓T	list	*1733/1737
4	ApaI	G↓GGCC↓C	list	3246/3242
5	AvrII	C↓CTAG↓G	list	834/838
6	BglIII	A↓GATC↓T	list	2798/2802

7	BmtI	G [↓] CTAG C	list	1895/1891
8	Bpu10I	CC TNA [↓] GC	list	2034/2037
9	BsiWI	C GTAC [↓] G	list	*50/54
10	BspDI	AT CG [↓] AT	list	*2767/2769
11	BspHI	T CATG [↓] A	list	5341/5345
12	BspQI	GCTCTTCN NNN [↓]	list	4505/4508
13	BsrGI	T GTAC [↓] A	list	2816/2820
14	BstBI	TT CG [↓] AA	list	*2837/2839
15	BstEII	G GTNAC [↓] C	list	6509/6514
16	BstXI	CCAN [↓] NNNN NTGG	list	3253/3249
17	Bsu36I	CC TNA [↓] GG	list	1940/1943
18	ClaI	AT CG [↓] AT	list	*2767/2769
19	EarI	CTCTTCN NNN [↓]	list	4505/4508
20	Eco53kI	GAG [↓] CTC	list	3682
21	EcoRI	G AATT [↓] C	list	*2804/2808
22	EcoRV	GAT [↓] ATC	list	3493
23	FspI	TGC [↓] GCA	list	*5736
24	HindIII	A AGCT [↓] T	list	2772/2776
25	KasI	G GCGC [↓] C	list	*2183/2187
26	KpnI	G [↓] GTAC C	list	2196/2192
27	MfeI	C AATT [↓] G	list	1726/1730
28	MluI	A CGCG [↓] T	list	*2822/2826
29	NarI	GG CG [↓] CC	list	*2184/2186
30	NdeI	CA TA [↓] TG	list	2855/2857
31	NheI	G CTAG [↓] C	list	1891/1895
32	NotI	GC GGCC [↓] GC	list	*1651/1655
33	PacI	TTA [↓] AT TAA	list	2788/2786
34	PaeR7I	C TCGA [↓] G	list	*7145/7149
35	PciI	A CATG [↓] T	list	4621/4625
36	PluTI	G [↓] GCGC C	list	*2187/2183
37	PmeI	GTTT [↓] AAAC	list	2831
38	PpuMI	RG GWC [↓] CY	list	1122/1125
39	PspOMI	G GGCC [↓] C	list	3242/3246
40	PspXI	VC TCGA [↓] GB	list	*7145/7149
41	SacI	G [↓] AGCT C	list	3684/3680
42	SapI	GCTCTTCN NNN [↓]	list	4505/4508
43	SfiI	GGCCN [↓] NNN NGGCC	list	*503/500
44	SfoI	GGC [↓] GCC	list	*2185
45	SnaBI	TAC [↓] GTA	list	*2850
46	SpeI	A CTAG [↓] T	list	511/515
47	SwaI	ATTT [↓] AAAT	list	2863
48	XbaI	T CTAG [↓] A	list	2842/2846
49	XhoI	C TCGA [↓] G	list	*7145/7149
50	XmnI	GAANN [↓] NNTTC	list	2462