

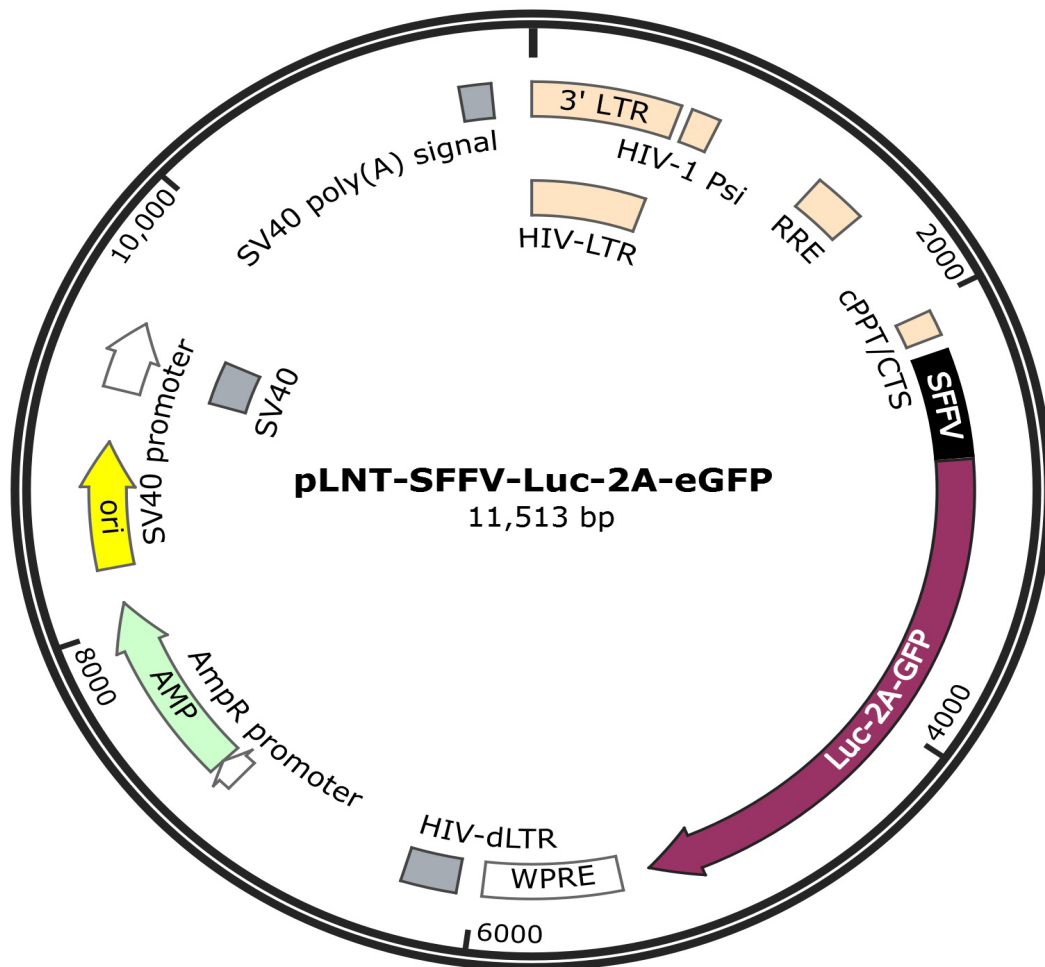
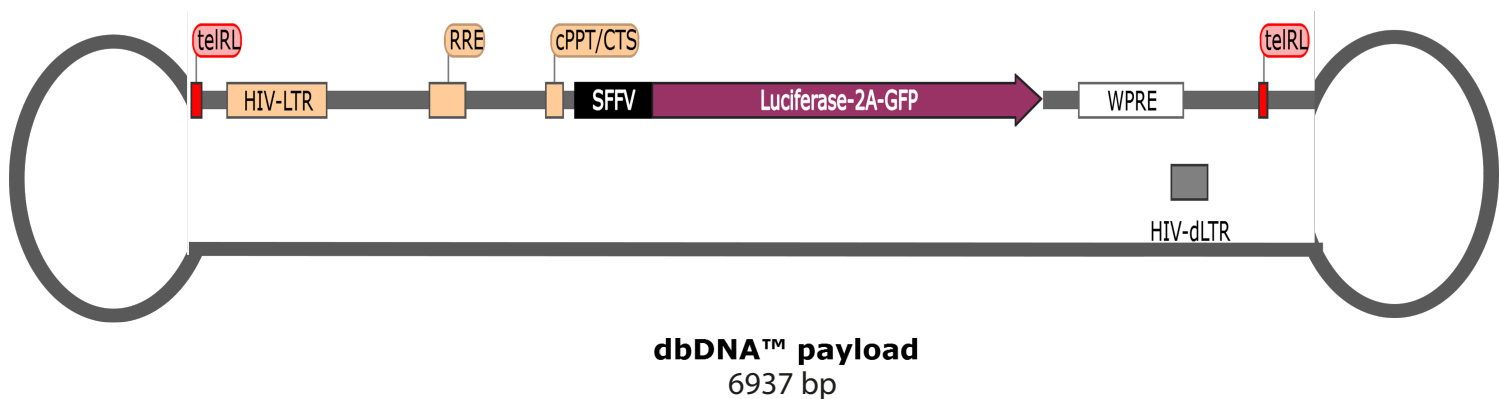
Production of lentiviral vectors using novel, enzymatically-produced, linear DNA vectors

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A

Created with SnapGene®

**B**

Supplementary Figure 1 – Schematic diagram of constructs. (A) pLNT-SFFV-Luc-2A-GFP contains a constitutive SFFV promoter, driving a codon-optimised firefly luciferase, linked by a bicistronic linker to GFP. These elements are flanked by a 3' and 5' Long terminal repeats (LTR). (B) The dbDNA™ payload contains all the features mentioned above, without the bacterial components. dbDNA™ is capped inside the telR/L sequences. Constructs produced using SnapGene®.

A

Lentivirus vectors	p24	FACS	qPCR
dbDNA™ pay, pDNA pack and env	4.93E+08	7.30E+06	1.08E+08
dbDNA™ env, pDNA pack and pay	2.21E+09	2.28E+07	1.92E+08
dbDNA™ pack, pDNA pay and env	8.84E+08	1.27E+07	2.52E+09
dbDNA™ pay and pack, pDNA env	8.23E+08	3.49E+07	7.57E+08
dbDNA™ pay and env, pDNA pack	4.90E+08	5.16E+06	8.27E+07
dbDNA™ pack and env, pDNA pay	2.18E+09	5.59E+07	2.11E+09
dbDNA™ pay, pack and env	4.15E+09	1.14E+07	1.89E+09
pDNA pay, pack and env	1.30E+10	1.72E+07	3.57E+08

B

Lentivirus vectors	p24	FACS	qPCR
pDNA pay, pack and env batch 1	1.30E+10	1.72E+07	3.75E+09
pDNA pay, pack and env batch 2	1.81E+10	2.67E+07	2.56E+08
pDNA pay, pack and env batch 3	1.33E+10	5.21E+07	2.36E+08
dbDNA™ pay, pack and env batch 1	4.15E+09	1.14E+07	1.89E+07
dbDNA™ pay, pack and env batch 2	4.67E+09	1.55E+07	2.60E+07
dbDNA™ pay, pack and env batch 3	3.45E+09	4.13E+07	5.85E+07
proTLx pay, pack and env batch 1	2.38E+10	3.15E+07	3.10E+10
proTLx pay, pack and env batch 2	2.18E+10	5.22E+06	8.24E+09
proTLx pay, pack and env batch 3	2.16E+10	3.63E+07	1.02E+10

Supplementary Table 1 – Titre values for all lentivectors produced. (A) p24, FACS and qPCR titres of all lentiviral vectors produced using combinations of plasmid and dbDNA™. **(B)** Titres of three separate batches of vectors produced using either plasmid, dbDNA™ and proTLx constructs.