

Plasmid name: pTYlinker (a lentiviral SIN vector)

Plasmid size: 7305 bp

Constructed by: Lab of Lung-Ji Chang, Tel: 352 392-3315, e-mail: lchang@mgm.ufl.edu

Comment: The unique cloning sites are underlined. This clone was generated by digesting pTYnlacZ with NotI and EcoRI and ligated with a linker fragment (NotI to EcoRI linker).

NOTE: Map shows close correlation but is not accurate for exact nucleotide location.

pTYlinker (7296 bp)

gtgGCCCGAGAGCTGCATCCGGAGTAtctagaTGGAGTTCGCGTTACATAACTTACGGTAAATGGCCCCGCTGGCTGAC
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3' U5 Modification

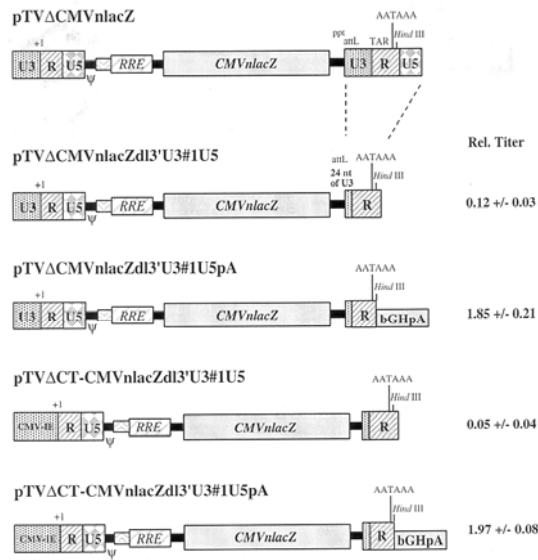
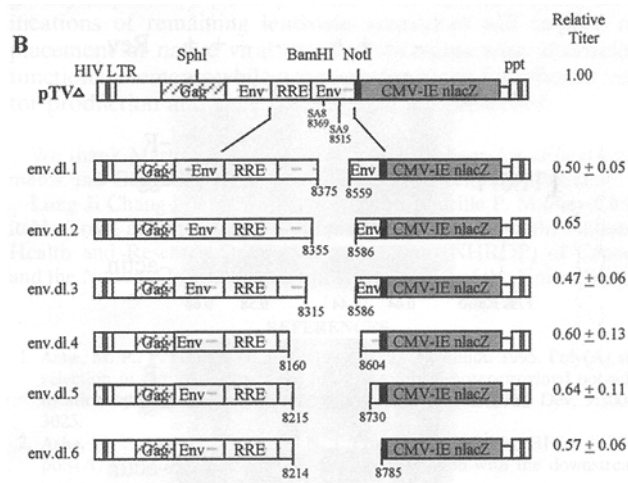


FIG. 7. Generation of 3' U5-deleted SIN vectors and transduction of nondividing cells. (A) pTV vectors with 3' U5 modifications. The 3' U5 was deleted by PCR mutagenesis as described under Materials and Methods (pTVΔCMVnlacZdl3'U3#1U5). In pTVΔCMVnlacZdl3'U3#1U5pA, bGH polyadenylation sequence was inserted at the *Hind*III site in the 3' R. The same modifications were introduced into the 5' U3-replaced pTV vectors. Relative titers to the control pTVΔCMVnlacZ were determined and shown on the right with standard errors ($n = 4$). The actual titer value of the wild-type pTV construct was $7.3 \pm 0.2 \times 10^7$. (B) Lentiviral transduction of dividing and nondividing cells. Viral vectors derived from pTVΔCMVnlacZ (a), pTVΔCMVnlacZdl3'U3#1U5pA (b), and pTVΔCT-CMVnlacZdl3'U3#1U5pA (c and d) were used to transduce both irradiated (a to c) and normal TE671 cells (d), and 48 h later, the transduced cells were fixed and stained with X-gal and photographed under a Zeiss Axiovert 25 inverted microscope (10×10). The enlarged morphological change of irradiated cells (a to c) was apparently different from normal cells (d). The transduction efficiency is presented under each photo as relative vector titers ($n = 4$). The actual titer value of the wild-type pTV construct was $6.9 \pm 0.1 \times 10^7$.

From Iwakuma T, et al. *Virology* 261:120, 1999 (Figure 7A).



From Cui Y, Iwakuma T, Chang L-J. *J Virol* 73: 6171, 1999 (Figure 2B).