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DATA SHEET

Reagent:	HIV-1 LTR CAT Reporter Vector (pCD54E8)
Catalog Number:	1520
Lot Number:	96111
Release Category:	C
Provided:	1 vial of ampicillin-resistant transformed bacteria DH5-a. Also grows in HB101.
Cloning Vector:	pC15CAT (Catalog #1527), a derivative of pSV0CAT.
Cloning Site:	*Hin*dIII.
Description:	The 5' end of the LTR to position -48 from the transcriptional start site is deleted, but the presence of the NF-kB enhancer sequence (reverse) resulted in restored transcriptional activity (CAT assay). Clone pC15CAT was cleaved with *Kpn*I, treated with *Bal*31 exonuclease, blunted and the *Xba*I linkers ligated. The resultant deletion mutant, pCD54E8, contains HIV-1_{IIIB} LTR sequences from -48 to +80 located in front of the CAT gene. The NFκB sequence has been cloned into the *Xba*I site at -48 in the reversed orientation. The NFκB insert sequence is: *Xba*I *Xba*I -48 5'cgcagcgagtcact/ctagatggaaagtccccagcggaaagtccct/ctagag*gcgag3'
Special Characteristics:	The 5' end of the LTR to position -48 from the transcriptional start site is deleted, but the presence of the NFκB enhancer sequence resulted in restored transcriptional activity as determined by CAT assay. The LTR sequences are cloned upstream to the CAT gene.
Recommended Storage:	-70degreeC
Contributor:	Dr. Steven F. Josephs.

References:

Gorman CM, Moffat LF, Howard BH. Recombinant genomes which express chloramphenicol acetyltransferase in mammalian cells. *Mol Cell Biol* **2**:1044-1051, 1982.

Arya SK, Guo C, Josephs SF, and Wong-Staal F. *Trans*-activator gene of human T-lymphotropic virus type III (HTLV-III). *Science* **9**:69-73, 1985.

Seikevitz M, Josephs, SF, Dukovich M, Peffer N, Wong-Staal F, Greene WC. Activation of the HIV-1 LTR by T cell mitogens and the trans-activator protein of HTLV-I. *Science* **238**:1575-1578, 1987.

Chang KS, Liu WT, Josephs SF. Regulation of cellular trans-activating activities in two different promonocytic leukemia cell lines. *Cancer Lett* **60**:75-83, 1991.

Seigel LJ, Ratner L, Josephs SF, Derse D, Feinberg M, Reyes G, O'Brien SJ, Wong-Staal F. Transactivation induced by human T-lymphotropic virus type III (HTLV III) maps to a viral sequence encoding 58 amino acids and lacks tissue specificity. *Virology* **148**:226-231.

NOTE:

Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: HIV-1 LTR CAT Reporter Vector (pCD54E8)from Dr. Steven Josephs (cat# 1520)." Also include the references cited above in any publications.

Scientists at for-profit institutions or who intend commercial use of this reagent must contact the NCI Technology Transfer Center at the following email address: lauren.nguyen-antczak@nih.gov, before the reagent can be released.

Last Updated February 14, 2019