Additional files for

CAR-T Cells Guided by the Single-Chain Fv of a Broadly Neutralizing Antibody Specifically and Effectively Eradicate the Reactivated Virus-latently-infected CD4$^+$ T-lymphocytes Isolated from HIV-1-infected Individuals Receiving Suppressive cART

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This file includes:

Supplemental Data (Supplemental Table S1 to S2, Supplemental Figure. S1)

Supplemental data

Supplemental Table S1. The sequences of VRC01-28BBZ.

Quantitative real-time RT–PCR analysis

VRC01 scFv	atggaaattgtgttgacacagtctccaggcaccctgtctttgtctccaggggaaacagccatcatctcttgtcggaccagtcagtatggttccttagc ctggtatcaacagaggcccggccaggcccccaggctcgtcatctattcgggctctactcgggccgctggcatcccagacaggttcagcggcag tcggtgggggccagactacaatctcaccatcagcaacctggagtcgggagattttggtgtttattattgccagcagtatgaatttttggccagggg accaaggtccaggtcgacattaagcgagagggcagaggaagtctgctaacatgcggtgacgtcgaggagaatcctggccaggtgcagctggt gcagtctgggggtcagatgaagaagcctggcgagtcgatgagaatttcttgtcgggcttctggatatgaatttattgattgtacgctaaattggattc gtctggccccggaaaaaggcctgagtggatgggatggctgaagcctcgggggggggccgtcaactacgcacgtccacttcagggcagagt gaccatgactcgagacgtttattccgacacagccttttggagctgcgctcgttgacagtagacgacacggccgtctacttttgtactaggggaaaa aactgtgattacaattgggacttcgaacactggggccggggcaccccggtcatcgtctcatca
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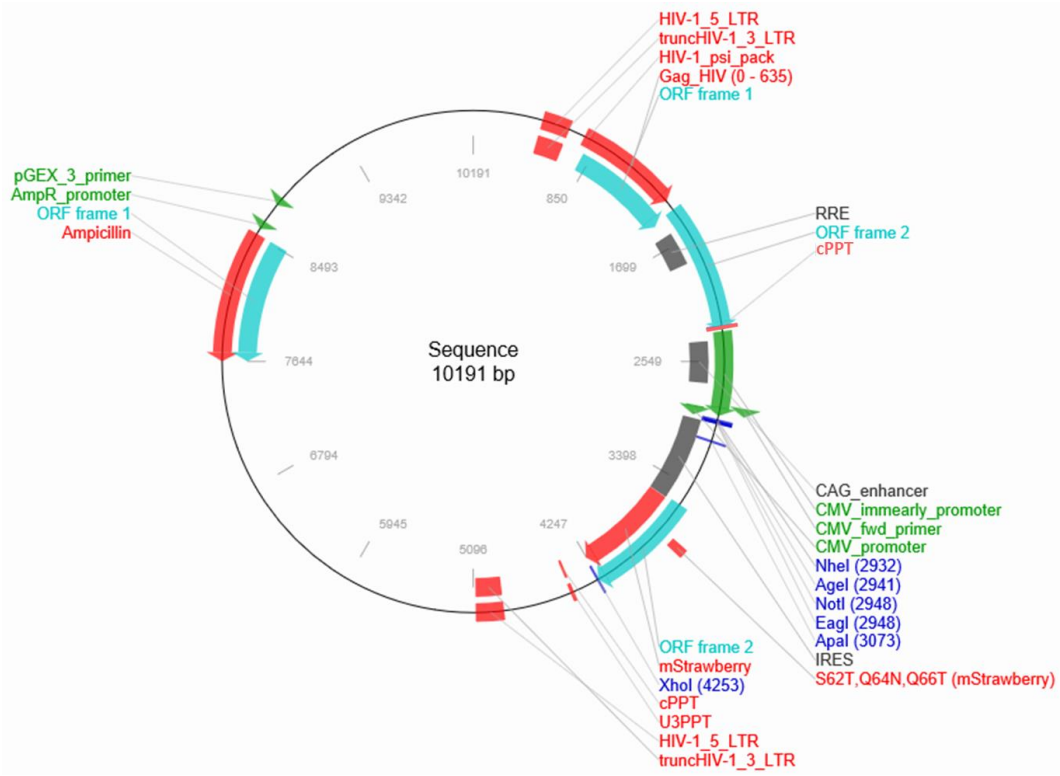
Supplemental Table S2. The primer sequences design.

Quantitative real-time RT–PCR analysis	
hGAPDH F	AGAAGGCTGGGGCTCATTTG
hGAPDH R	AGGGGCCATCCACAGTCTTC
hβ-actin-F	TCCTCCCTGGAGAAGAGCTA
hβ-actin-R	TCAGGAGGAGCAATGATCTTG
SK38	ATAATCCACCTATCCCAGTAGGAGAAA
SK39	TTTGGTCCTTGTCTTATGTCCAGAATGC
HIVTotRNA-5F	CTGGCTAACTAGGGAACCCACTGCT
HIVTotRNA-5R	GCTTCAGCAAGCCGAGTCCTGCGTC
qGFP-F1	AGATCCGCCACAACATCGAG
qGFP-R1	GTCCATGCCGAGAGTGATCC
qGFP-F2	CAAGATCCGCCACAACATCG
qGFP-R2	GACTGGGTGCTCAGGTAGTG
qPCR(CD3ζ-flag)-F	GCCTTTACCAGGGTCTCA
qPCR(CD3ζ-flag)-R	ACTTATCGTCGTCATCCTTG
qPCR(VRC-01)-F	ATTTTTTGGCCAGGGGACC
qPCR(VRC-01)-R	AGGATTCTCCTCGACGTCACC



Supplemental Figure S1. The map of pCPPT-IRES-mStrawberry. pCPPT-IRES-mStrawberry is HIV-1-derived lentiviral vector originally constructed by our own lab. The vector contains elements that allow packaging of the foreign gene into lentiviral particles to infect both dividing and non-dividing mammalian cells, and introduce high-level gene expression in target cells after integrating into the genome. The lentiviral vector contains *cis*-acting sequences of HIV-1 required for packaging, reverse transcription, and integration, as well as single restriction sites (NheI, AgeI, NotI, EagI and ApaI) for the cloning of heterologous genes. All the suequences for Gag, Pol, Env, regulatory and accessory proteins was removed except for a 659 bp seuqnece in p17 without ATG initiation codon for efficient packaging, The Rev response element (RRE), polypurine tract (PPT) element, and central PPT (cPPT)

element were included in the pCPPT-IRES-mStrawberry vector. The only detectable expression originated from the internal CMV promoter of the vector in the absence of these transacting factors. The sequences of IRES and mStrawberry were inserted into pCPPT-IRES-mStrawberry downstream of the CMV promoter to serve as reporter genes.