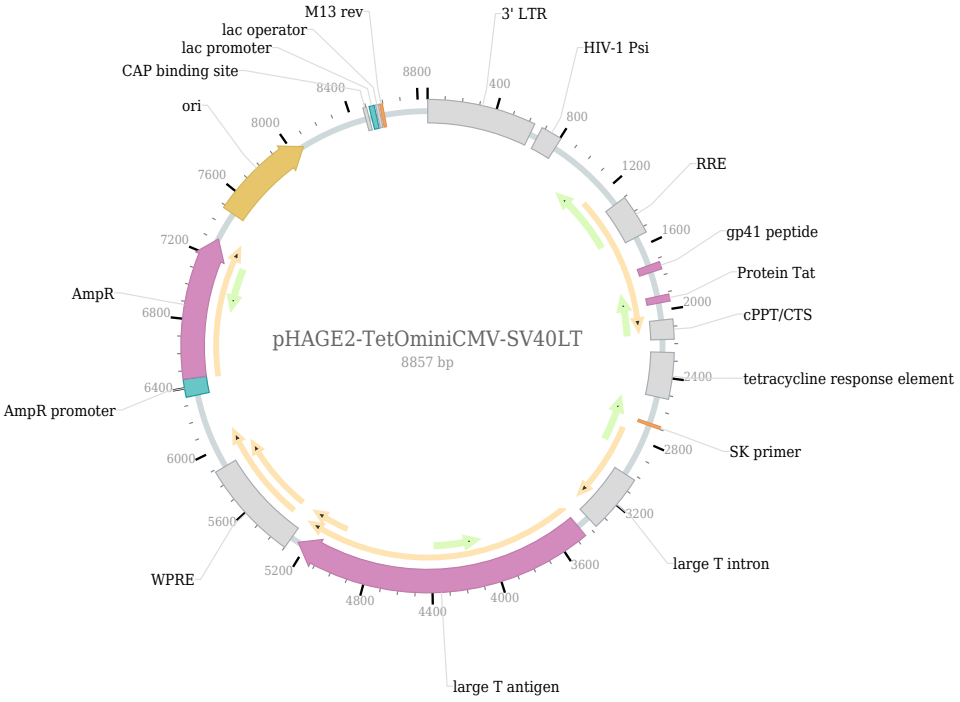
pHAGE2-TetOminiCMV-SV40LT

Vector ID	V016857
Antibiotic Resistance	Ampicillin
Length	8857 bp
Vector Type	Protein expression, Immortalization, Tetracycline inducible
Host	Mammalian cells, Lentivirus

Product Information

Replication Origin	ori
Promoter	Tet
Growth Strain(s)	Stbl3
Growth Temperature	37℃
Comment	pHAGE2-TetOminiCMV-SV40LT is a pHAGE2 backbone lentiviral vector carrying SV40 large T antigen (SV40LT) under the tetracycline-inducible TetO-miniCMV promoter. Its SV40LT expression is strictly controlled by doxycycline to reversibly immortalize primary somatic cells like mouse embryonic fibroblasts (MEFs) during reprogramming assays. It bears ampicillin resistance for bacterial screening and integrates stably into mammalian genomes after lentiviral packaging and transduction. This plasmid was created by Schöler's lab and used in 2019 Cell Stem Cell research to boost cell proliferation for Oct4-free SKM iPSC reprogramming.

Vector Map



Plasmid Resuspension Protocol

1. Centrifuge at 5,000×g for 5 min.
2. Carefully open the tube and add sterile water to dissolve the DNA: add 20 µl for 5 µg plasmid, and 100 µl for 100 µg plasmid.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
5. Store the plasmid at -20 ℃.