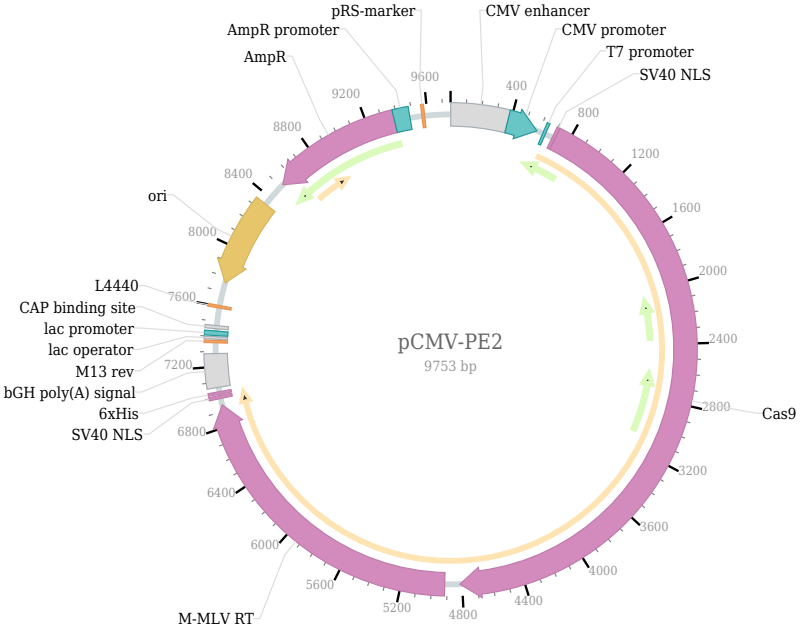
pCMV-PE2

Vector ID	V011280
Antibiotic Resistance	Ampicillin
Length	9753 bp
Vector Type	Mammalian Expression

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	CMV
Cloning Method	Ligation Independent Cloning
5' Primer	T7-forward
3' Primer	BGH-reverse
Growth Strain(s)	DH10b
Growth Temperature	37℃
Comment	pCMV-PE2 is a prime editor expression plasmid driven by CMV promoter from David Liu's lab. It encodes SpCas9 H840A nickase fused to an engineered pentamutant M-MLV reverse transcriptase for DSB-free genome editing. Co-transfected with pegRNA, it performs all 12 base conversions, precise insertions and deletions without donor DNA. Combined with a strand-nicking sgRNA, it forms PE3/PE3b systems for much higher editing efficiency with minimal indel byproducts.

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 ℃.