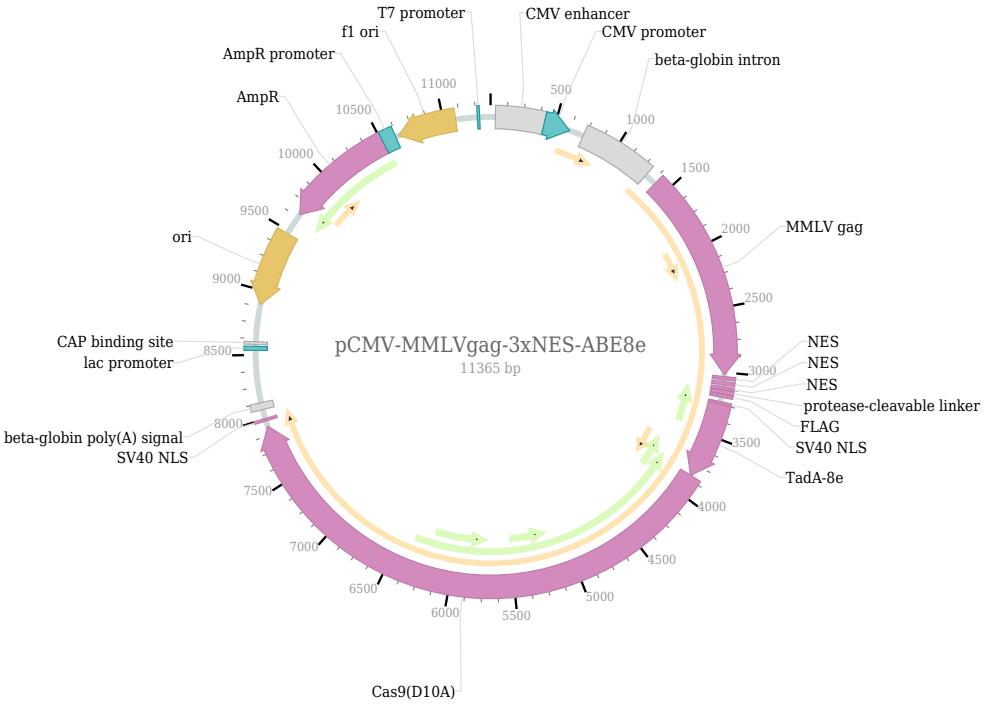
pCMV-MMLVgag-3xNES-ABE8e

Vector ID	V017285
Antibiotic Resistance	Ampicillin
Length	11365 bp
Vector Type	Gene expression
Host	Mammalian cells

Product Information

Replication Origin	ori
Promoter	CMV
Growth Strain(s)	DH5a
Growth Temperature	37℃
Comment	This plasmid pCMV-MMLVgag-3xNES-ABE8e is a core construct for generating v4 BE-eVLPs in Liu Lab's 2022 Cell study. It drives expression of a fusion protein consisting of MMLV Gag, triple nuclear export signals, a protease-cleavable linker and full ABE8e. ABE8e comprises evolved TadA-8e deaminase fused to nCas9 (D10A nickase) flanked by nuclear localization signals. The 3×NES retains fusion proteins in producer cell cytoplasm to boost RNP packaging into DNA-free virus-like particles. After VLP maturation, protease cleavage separates Gag-NES from functional ABE8e for safe, low-off-target in vivo base editing.

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 ℃.