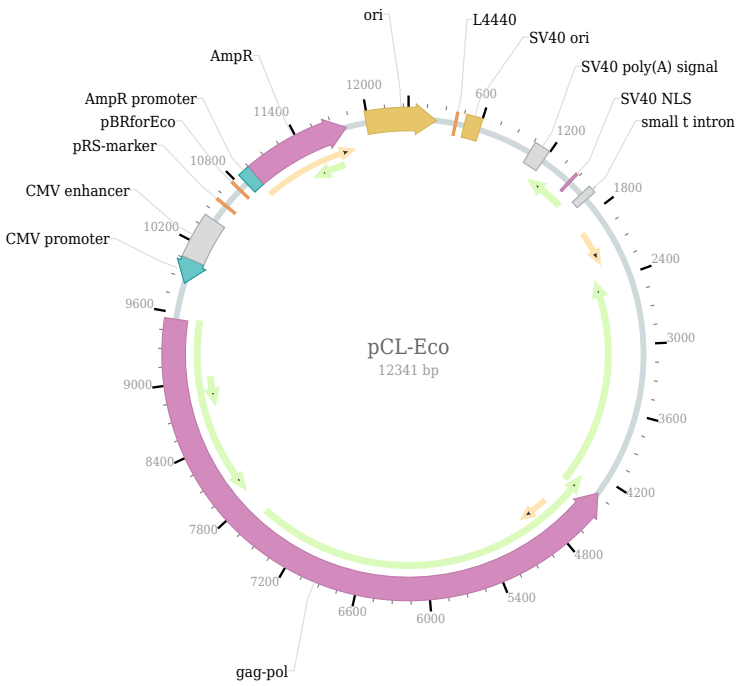
pCL-Eco

Vector ID	V002459
Antibiotic Resistance	Ampicillin
Length	12341 bp
Vector Type	Mammalian Expression, Retroviral

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	CMVd1
Cloning Method	Restriction Enzyme
5' Primer	LXSN primer
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The pCL-Eco vector is a specialized retroviral packaging plasmid designed to produce replication-defective retroviruses. Its primary functions include: Virus Production: It provides essential viral proteins (gag, pol, and env genes from the Eco-tropic strain) to package recombinant retroviruses when co-transfected with a transfer vector in packaging cell lines (e.g., 293T cells). Gene Delivery: The vector uses a CMV promoter to drive high-efficiency transgene expression in mammalian cells, enabling stable or transient gene delivery for research applications like gene therapy or functional studies. Selection & Amplification: It carries an ampicillin resistance gene for bacterial selection during plasmid propagation and cloning. In summary, pCL-Eco streamlines the generation of custom retroviruses to deliver target genes into mammalian cells efficiently.

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 ℃.