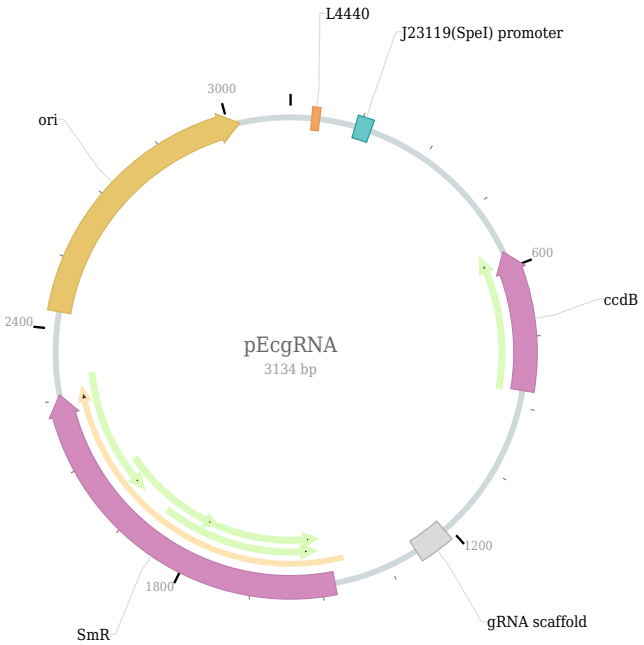
pEcgRNA

Vector ID	V000012
Antibiotic Resistance	Spectinomycin
Length	3134 bp
Vector Type	Bacterial Expression

Product Information

Replication Origin	ori
Source/Author	Sheng Yang
Copy Number	High Copy
Promoter	J23119(SpeI)
Cloning Method	Ligation Independent Cloning
Growth Strain(s)	DB3.1
Growth Temperature	37℃
Comment	pEcgRNA is a component of the pEcCas/pEcgRNA CRISPR-Cas9 system, a plasmid vector designed for genome editing in Escherichia coli. It serves as the sgRNA expression vector, containing a site for inserting a target-specific guide RNA (gRNA) sequence. The plasmid has a high-copy-number backbone derived from pTargetF, is approximately 3.1 kb in size, and carries a spectinomycin resistance gene (Spect+) for selection in bacteria. It is used in conjunction with the pEcCas plasmid to enable precise gene knock-out or knock-in editing in E. coliand other microorganisms.

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 ℃.