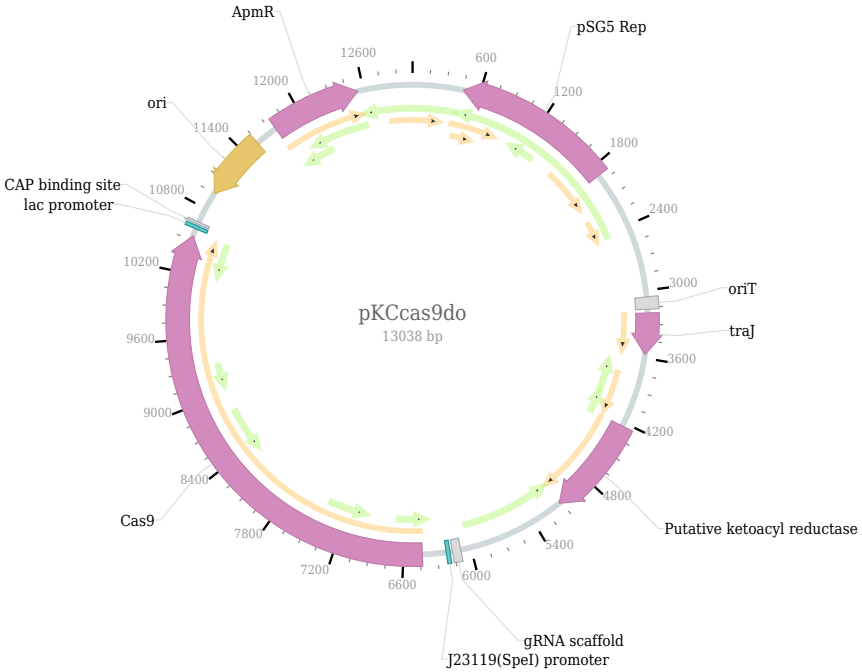
pKCcas9do

Vector ID	V016695
Antibiotic Resistance	Apramycin
Length	13038 bp
Vector Type	Gene knockout
Host	Streptomyces

Product Information

Replication Origin	ori
Promoter	J23119(SpeI)
Growth Strain(s)	DH5a
Growth Temperature	30℃
Comment	pKCcas9do is a CRISPR/Cas9 vector for high-efficiency genome editing in Streptomyces. The ptipA promoter drives a codon-optimized SpCas9 gene, while the J23119 promoter drives the gRNA scaffold for targeting specificity. Additional features include an actII-orf4 homology arm for recombination , oriT (transfer origin), traJ (mobilization protein), ApmR (apramycin resistance), pSG5 replicon for temperature-sensitive replication in Streptomyces, and lac promoter for E. coli selection

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 ℃.