pGRB

Vector ID	V017236
Antibiotic Resistance	Ampicillin
Length	2705 bp
Vector Type	Gene knockout
Host	E. coli

Product Information

Replication Origin	ori
Promoter	J23119(SpeI)
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pGRB is a high-copy gRNA expression backbone for E. coli CRISPR-Cas9 editing created in Tao Chen's lab. It uses constitutive promoter J23100 to drive gRNA transcription and carries ampicillin resistance marker bla for selection. Multiple targeting gRNAs can be assembled into pGRB in one Golden Gate reaction for multiplex genome modification. After editing, arabinose induction triggers Cas9 to cleave bla on pGRB, enabling simple plasmid curing for iterative editing cycles.

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 ℃.