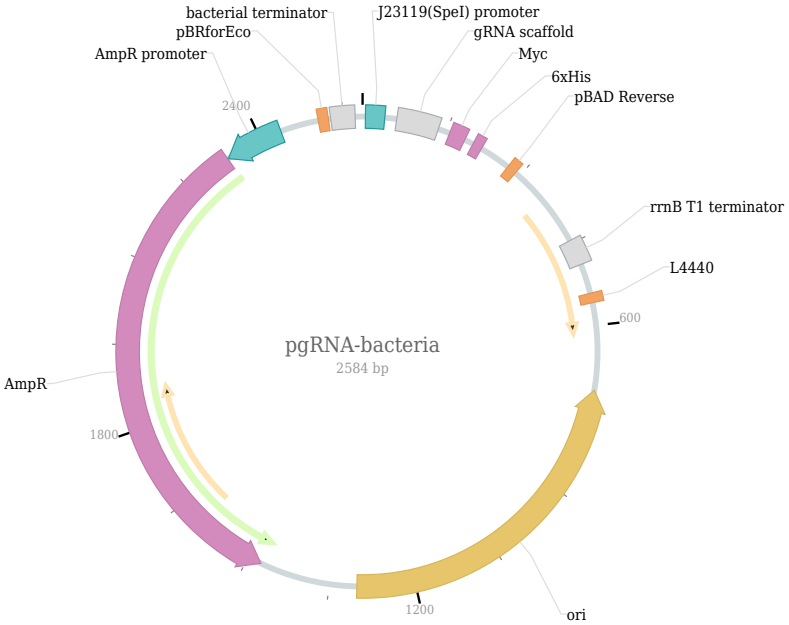
pgRNA-bacteria

载体编号 Vector ID	V001091
抗性 Antibiotic Resistance	Ampicillin
长度 Length	2584 bp
载体类型 Vector Type	Bacterial Expression, CRISPR

产品信息

复制子 Replication Origin	ori
拷贝数 Copy Number	High Copy
启动子 Promoter	J23119(SpeI)
克隆方法 Cloning Method	Restriction Enzyme
培养菌株 Growth Strain(s)	DH5α
备注 Comment	pgRNA-bacteria is a high-copy bacterial plasmid created by the Qi lab to express customizable S. pyogenes sgRNA for CRISPRi in strains like E. coli. It uses the constitutive J23119 promoter to transcribe sgRNA with a Cas9-binding scaffold and terminator, carrying ampicillin resistance for selection. When paired with pdCas9-bacteria encoding catalytically dead dCas9, it forms a complete CRISPRi toolkit to reversibly repress target bacterial genes without genome cleavage. This vector enables single or multiplex gene knockdown with minimal off-target effects for bacterial transcriptional regulation research.

质粒图谱



复溶方法

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 ℃.