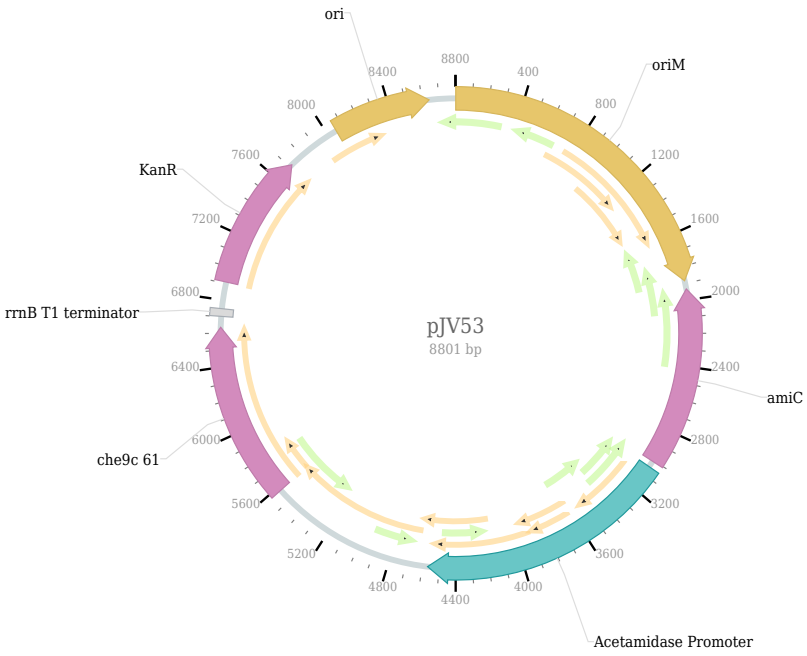
pJV53

载体编号 Vector ID	V012094
抗性 Antibiotic Resistance	Kanamycin
长度 Length	8801 bp
载体类型 Vector Type	Bacterial Expression

产品信息

复制子 Replication Origin	ori
筛选标记 Selection Marker	Kanamycin
拷贝数 Copy Number	High Copy
克隆方法 Cloning Method	Restriction Enzyme
培养菌株 Growth Strain(s)	DH10B
培养温度 Growth Temperature	37℃
备注 Comment	pJV53 is an acetamide-inducible mycobacterial shuttle plasmid co-expressing mycobacteriophage Che9c gp60 (exonuclease) and gp61 (ssDNA-binding protein) for mycobacterial recombineering. Its tightly controlled low basal expression avoids severe host toxicity seen in related plasmids like pJV24 and pJV63. It drastically boosts homologous allelic exchange efficiency in both fast-growing M. smegmatis and slow-growing M. tuberculosis H37Rv. This vector has become the standard tool to easily generate targeted gene knockout mutants in mycobacteria.

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 ℃.