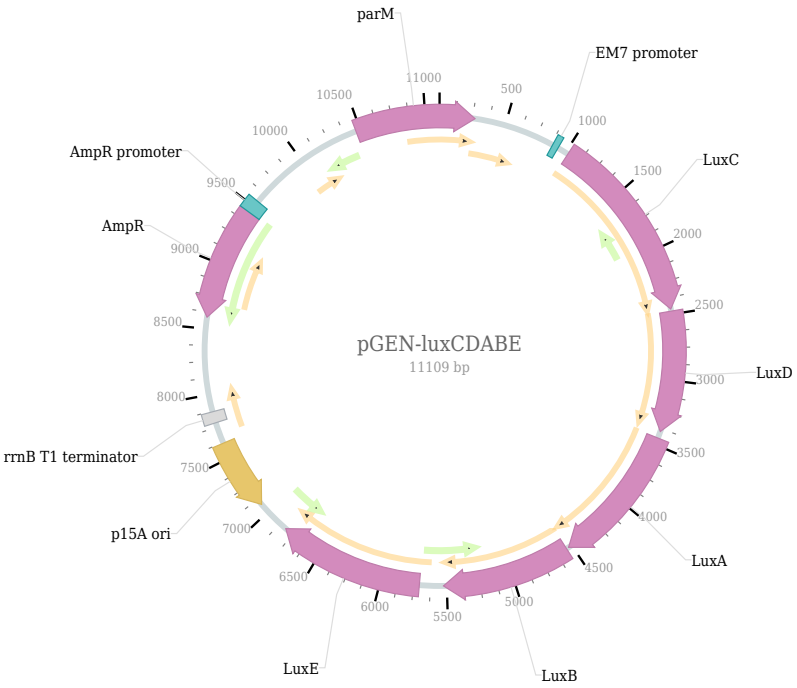
pGEN-luxCDABE

载体编号 Vector ID	V000912
抗性 Antibiotic Resistance	Ampicillin
长度 Length	11109 bp
载体类型 Vector Type	Luciferase

产品信息

复制子 Replication Origin	p15A ori
拷贝数 Copy Number	Low Copy
启动子 Promoter	EM7
克隆方法 Cloning Method	Restriction Enzyme
5' 引物 5' Primer	CATATGAAGCTTGGTACCGGGATC
3' 引物 3' Primer	CTTTCGGGAAAGATTTCAACCTGG
培养菌株 Growth Strain(s)	DH10B
培养温度 Growth Temperature	37℃
备注 Comment	pGEN-luxCDABE is a low-copy bioluminescent reporter plasmid built on the pGEN222 backbone. It carries the luxCDABE luciferase operon controlled by synthetic constitutive EM7 promoter, named P_em7-lux. Its hok-sok and par loci ensure stable plasmid retention in UPEC both in vitro and inside infected mice. Researchers can swap EM7 with target promoters like fliC to make gene-specific luminescence reporters for real-time infection imaging. This vector was used in the study to track UPEC spread and fliC expression during ascending urinary tract infections.

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 ℃.