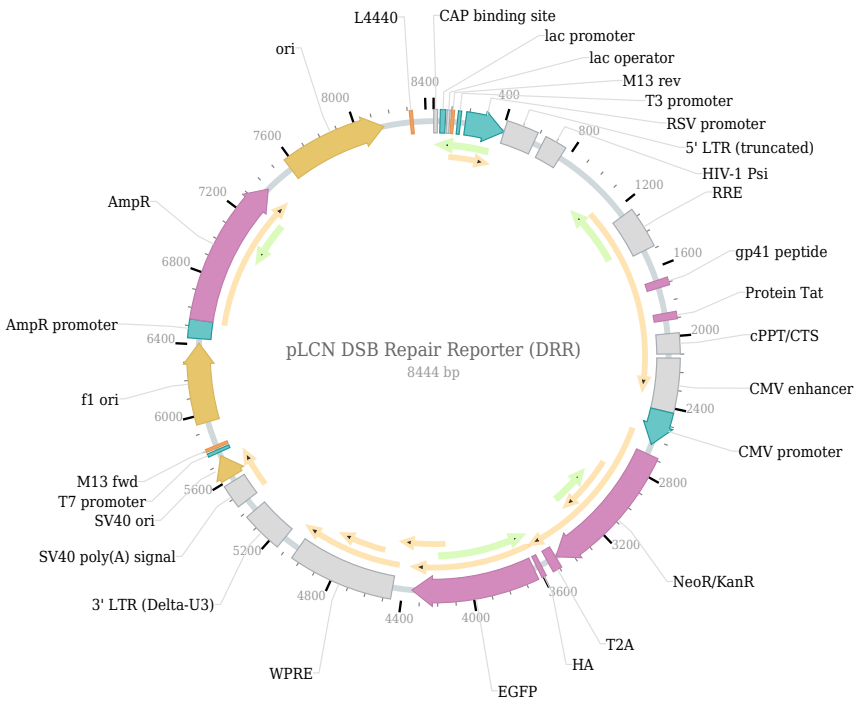
pLCN DSB Repair Reporter (DRR)

载体编号 Vector ID	V005929
抗性 Antibiotic Resistance	Ampicillin
长度 Length	8444 bp
载体类型 Vector Type	Lentiviral

产品信息

复制子 Replication Origin	ori
筛选标记 Selection Marker	Neomycin (select with G418)
拷贝数 Copy Number	High Copy
启动子 Promoter	RSV
5' 引物 5' Primer	CGC AAA TGG GCG GTA GGC GTG
培养菌株 Growth Strain(s)	Stbl3
备注 Comment	pLCN DSB Repair Reporter (DRR) is a lentiviral pLenti CMV Neo-based reporter plasmid developed to quantify two major DSB repair pathways simultaneously. It carries two inverted I-SceI cut sites upstream a disrupted GFP cassette with a stop codon, plus a BFP tag for transfection normalization. NHEJ repair restores GFP expression, while HR using an exogenous mCherry donor yields mCherry-positive cells detectable via flow cytometry. This tool was used in the CYREN study to prove CYREN suppresses NHEJ and promotes HR at intrachromosomal breaks in S/G2 phase.

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 ℃.