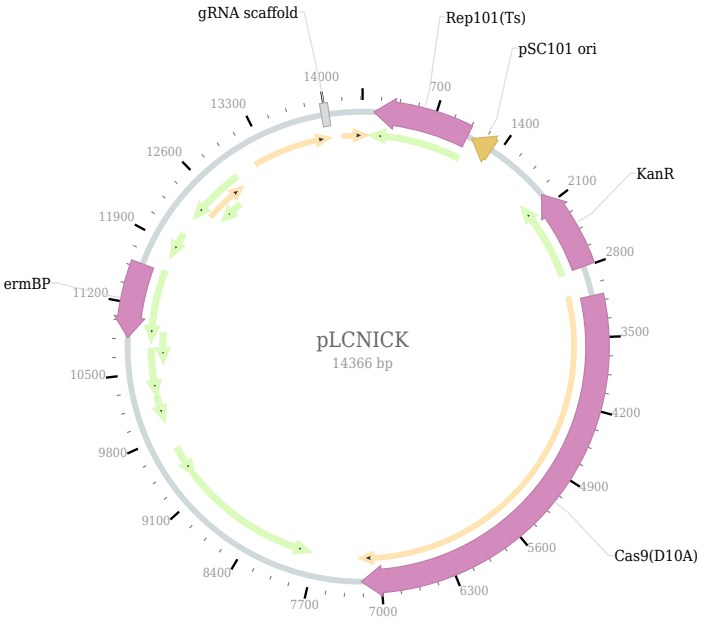
pLCNICK

Vector ID	V014621
Antibiotic Resistance	Kanamycin
Length	14366 bp
Vector Type	Gene knockout
Host	Lactobacillus

Product Information

Replication Origin	pSC101 ori
Copy Number	Low Copy
Growth Strain(s)	Stbl3
Growth Temperature	30℃
Comment	The pLCNICK plasmid is a crucial tool for genome editing in Lactobacillus casei. Derived from the CRISPR-Cas9D10A nickase system, it enables rapid and precise genetic manipulations. Rep101(Ts) is a temperature-sensitive replication protein that functions only at low temperatures. Above 37°C, it becomes inactive, causing plasmid loss. Stable replication occurs at 30°C, >16 hours (or lower, e.g., 28–30°C). Please do not exceed 32°C.

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 ℃.