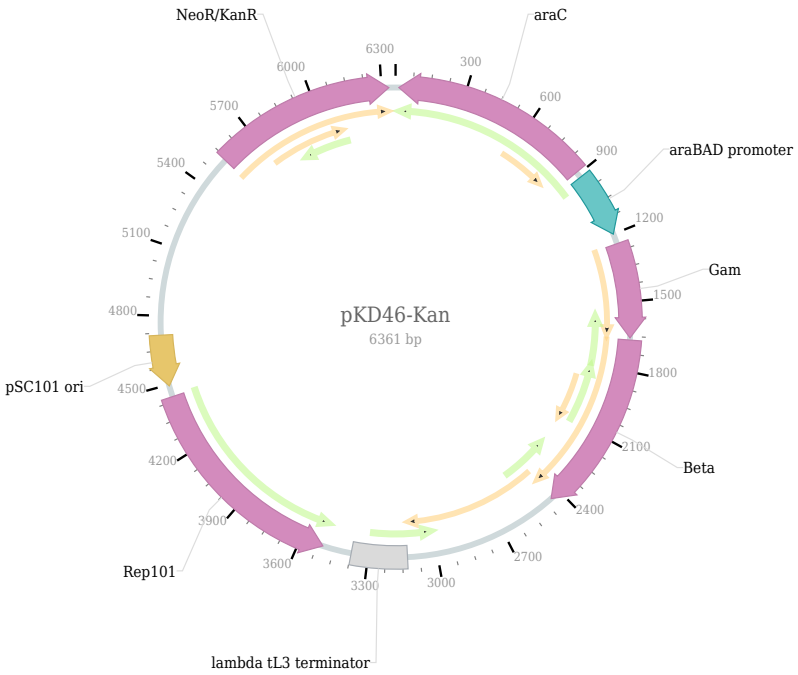
pKD46-Kan

Vector ID	V014946
Antibiotic Resistance	Kanamycin
Length	6361 bp

Product Information

Replication Origin	pSC101 ori
Copy Number	Low Copy
Promoter	araBAD
Growth Strain(s)	DH10B
Growth Temperature	30℃
Comment	pSC101 ori is a low-copy replication origin that requires the Rep101 protein, which is a temperature-sensitive protein. When bacteria containing a plasmid with this ori is cultured at 37℃, the plasmid will be lost. 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 ℃.