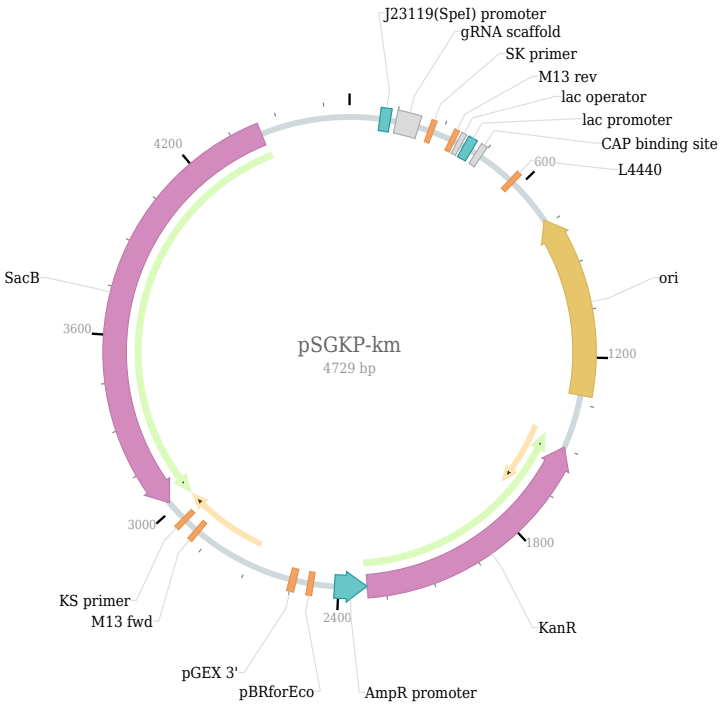
pSGKP-km

Vector ID	V006674
Antibiotic Resistance	Kanamycin
Length	4729 bp
Vector Type	Bacterial Expression, CRISPR, Synthetic Biology

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	J23119(SpeI)
Cloning Method	Gibson Cloning
Growth Strain(s)	Top10
Growth Temperature	37℃
Comment	The pSGKP-km is a 4,729 bp plasmid vector designed for CRISPR-Cas9-mediated genome editing in Klebsiella pneumoniae. It functions as an sgRNA expression plasmid within a two-plasmid system and features a high copy number origin of replication. Selection is achieved via a kanamycin resistance gene (50 μg/mL). The vector utilizes Gibson Assembly cloning and is specifically optimized for use in bacterial hosts like strain Top10 or DH5alpha at 37°C, enabling precise genetic manipulations.

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 ℃.