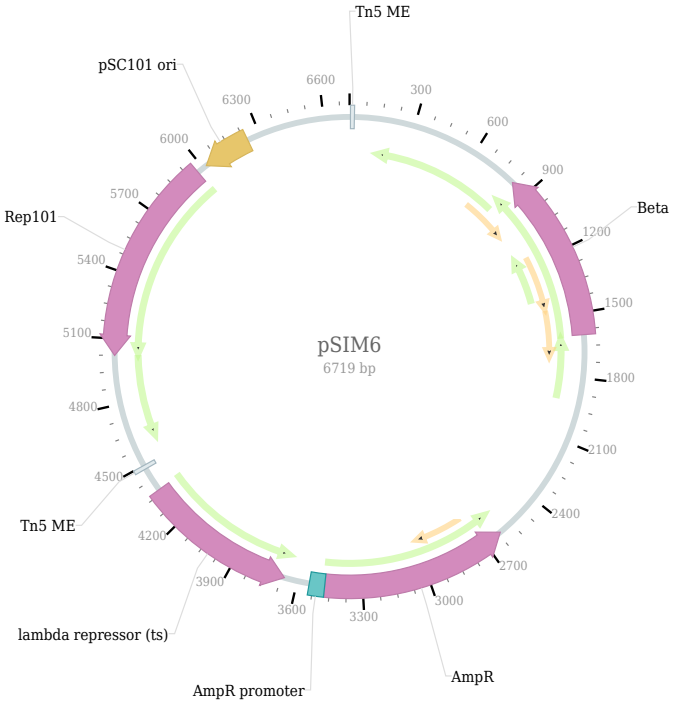
pSIM6

Vector ID	V012110
Antibiotic Resistance	Ampicillin
Length	6719 bp
Vector Type	Homologous recombinant vectors

Product Information

Replication Origin	pSC101 ori
Copy Number	Low Copy
Growth Strain(s)	stbl3
Growth Temperature	30℃
Comment	Plasmid pSim6 was constructed by recombining the defective prophage into the pSC101 plasmid backbone. A 6,719-bp plasmid characterized by ONT sequencing, which is a low-copy homologous recombination vector. Its replication requires the temperature-sensitive Rep101 protein, resulting in plasmid loss at 37°C, which enables controlled gene expression. Featuring multiple cloning sites and an ampicillin resistance marker, it supports diverse DNA insertions in cell lines like 293/CV-1. As a constitutive vector, it ensures stable, continuous protein production, making it ideal for temperature-regulated gene editing and expression studies.

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 ℃.