pBV220

Vector ID	V000089
Antibiotic Resistance	Ampicillin
Length	3665 bp
Vector Type	E. coli Expression Vectors

Product Information

Replication Origin	ori
Copy Number	High copy number
Promoter	pR/pL
Cloning Method	Enzyme digestion and ligation
5' Primer	pBV220-F: 5′-AAGAAGGGCAGCATTCAAAG-3‘
3' Primer	pBV220-R: 5′-CTGCGTTCTGATTTAATCTG-3‘
Growth Strain(s)	DH5a
Growth Temperature	30℃
Comment	pBV220 (Cat No.: V000089) is a high-performance E. coli expression vector engineered around the λ phage-derived PL and PR promoters, offering efficient and cost-effective gene expression control through its core features: it is equipped with λPL and λPR promoters that exhibit strong transcriptional initiation capability, regulated by a temperature-sensitive λ repressor (ts) which eliminates the need for chemical inducers, with temperature-dependent regulation where the active repressor inhibits PL/PR promoters at 30℃ and shifting the culture temperature to 42℃ inactivates the repressor to trigger target gene expression; the vector offers cloning and expression advantages such as a multi-cloning site (MCS) downstream of the SD sequence to facilitate insertion of foreign genes with an initiation ATG for expressing non-fusion proteins, and contains strong rrnB T1 and T2 transcription terminators to prevent read-through and enhance system stability.

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 ℃.