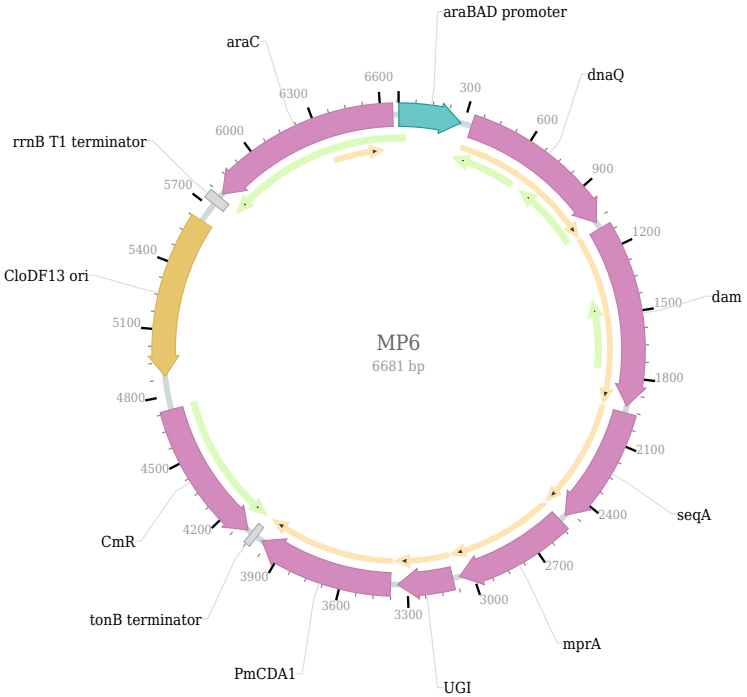
MP6

Vector ID	V006635
Antibiotic Resistance	Chloramphenicol
Length	6681 bp
Vector Type	Bacterial Expression

Product Information

Replication Origin	CloDF13 ori
Copy Number	High Copy
Promoter	araBAD
Cloning Method	Ligation Independent Cloning
5' Primer	pBAD-F
3' Primer	CAT-F
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The plasmid vector MP6 is a mutagenesis plasmid designed for highly efficient in vivo mutagenesis in E. coli. It functions as an inducible system, where the expression of multiple mutagenic genes—including dnaQ926 (disrupting proofreading), dam and seqA (impairing mismatch repair), and ugi and cda1 (promoting cytosine deamination)—is controlled by an arabinose-inducible promoter. This design significantly enhances mutation rates while offering a broad mutational spectrum, making it a potent tool for laboratory evolution experiments.

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 ℃.