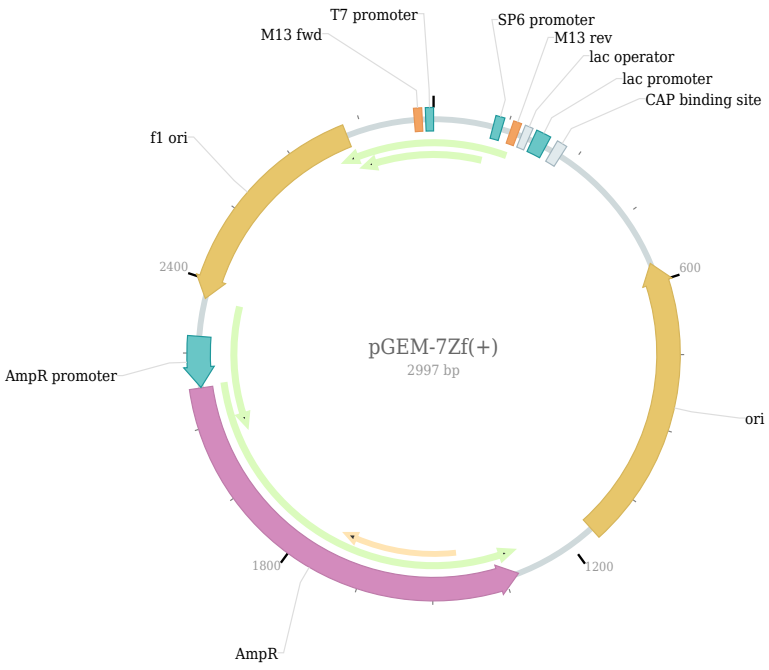
pGEM-7Zf(+)

Vector ID	V005495
Antibiotic Resistance	Ampicillin
Length	2997 bp
Vector Type	E. coli Expression Vectors

Product Information

Replication Origin	ori
Source/Author	Promega
Copy Number	High copy number
Cloning Method	Enzyme digestion and ligation
5' Primer	M13 fwd
3' Primer	M13 rev
Growth Strain(s)	DH5a
Comment	The pGEM-7Zf(+) and pGEM-7Zf(–) Vectors are derivatives of the pGEM-3Zf(+) Vector and contain the origin of replication of the filamentous phage f1. These plasmids serve as standard cloning vectors, as templates for in vitro transcription and can be used for the production of circular ssDNA. These plasmids contain SP6 and T7 RNA polymerase promoters flanking a region of multiple cloning sites within the α-peptide coding region of β-galactosidase. Insertional inactivation of the α-peptide allows recombinant clones to be identified directly by color screening on indicator plates when using appropriate E. coli strains (e.g., JM109). The multiple cloning region is unique and includes restriction sites for ApaI, AatII, SphI, XbaI, XhoI, EcoRI, KpnI, SmaI, ClaI, HindIII, BamHI, SacI, BstXI and NsiI. This arrangement is designed specifically for generating unidirectional deletions with the Erase-a-Base System. pGEM-7Zf(+) and pGEM-7Zf(–) Vectors are identical except for the orientation of the f1 origin.

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 ℃.