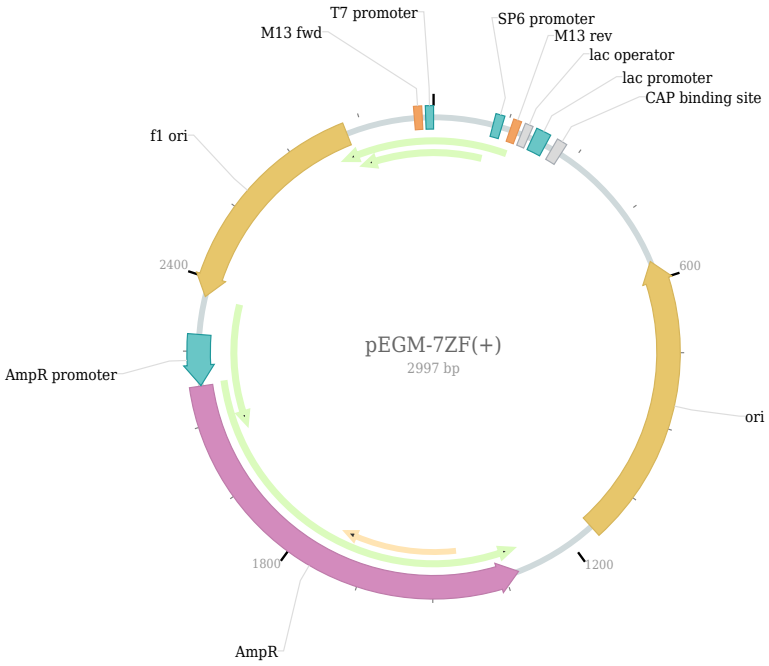
pEGM-7ZF(+)

Vector ID	V012589
Antibiotic Resistance	Ampicillin
Length	2997 bp
Vector Type	E. coli Cloning Vectors

Product Information

Replication Origin	ori
Cloning Method	Enzyme digestion and ligation
Comment	The pGEM -7Zf(+) Vector (a) is a derivative of the pGEM -3Zf(+) Vector (a) and con- tains the origin of replication of the filamentous phage f1. The plasmid serves as a standard cloning vector, as a template for in vitro transcription, and can be used for the production of circular ssDNA. The plasmid contains SP6 and T7 RNA poly- merase promoters flanking a region of multiple cloning sites within the α -peptide coding region of β -galactosidase (1). Insertional inactivation of the α -peptide allows recombinant clones to be directly identified by color screening on indicator plates. The multiple cloning region is unique and includes restriction sites for Apa I, Aat II, Sph I, Xba I, Xho I, Eco R I, Kpn I, Sma I, Csp 45 I, Cla I, Hin d III, Bam H I, Sac I, Bst X I and Nsi I. This arrangement is designed specifically for generation of unidirec- tional deletions with Promega's Erase-a-Base System. The polylinker contains restriction enzyme sites that produce 5′ overhangs or blunt ends (sensitive to Exonuclease III) flanked on both sides by blocks of restriction sites that generate 3′ overhangs (resistant to Exonuclease III).

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 ℃.