pDG148

Vector ID	V013037
Antibiotic Resistance	Ampicillin
Length	8750 bp
Vector Type	Protein expression
Host	Bacillus subtilis

Product Information

Replication Origin	ori
Growth Strain(s)	DH5a
Growth Temperature	30℃
Comment	pDG148 is an E. coli–Bacillus shuttle vector with an IPTG-inducible lac promoter, Amp and Kan resistance, for inducible gene expression in Bacillus subtilis and other Gram-positive bacteria. The Pspac (originally designated spac-I) promoter is a hybrid IPTG-inducible promoter constructed by Yansura and Henner (1984), fusing a Bacillus subtilis phage SPO-1 promoter with the Escherichia coli lac operator placed at the transcription initiation site. Co-expressed with a constitutively produced E. coli LacI repressor, Pspac-driven transcription is repressed without IPTG and rapidly derepressed upon IPTG addition, establishing the first lac-based, transcriptionally regulated expression system in B. subtilis.

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 ℃.