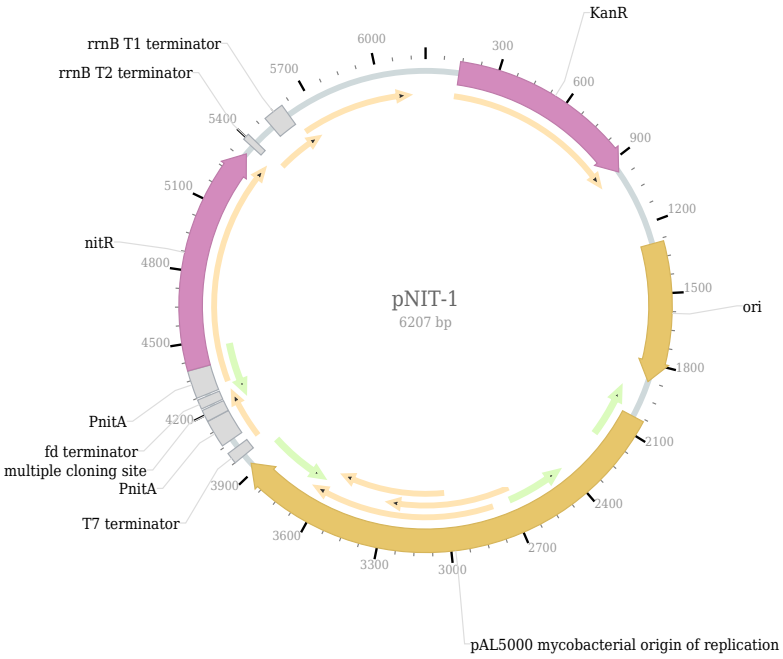
pNIT-1

Vector ID	V004308
Antibiotic Resistance	Kanamycin
Length	6207 bp
Vector Type	Expression vector

Product Information

Replication Origin	ori
Source/Author	Pandey AK, Raman S, Proff R, Joshi S, Kang CM, Rubin EJ, Husson RN, Sassetti CM.
Comment	pNIT-1 is an E. coli-mycobacteria shuttle plasmid for nitrile-inducible gene expression (Pandey et al. 2009): the Rhodococcus nitA promoter and nitR activator form a positive-feedback circuit with an MCS in a pMV261 backbone (6207 bp, kanamycin resistance). Isovaleronitrile induction achieves over 100-fold expression in M. smegmatis and M. tuberculosis.

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 ℃.