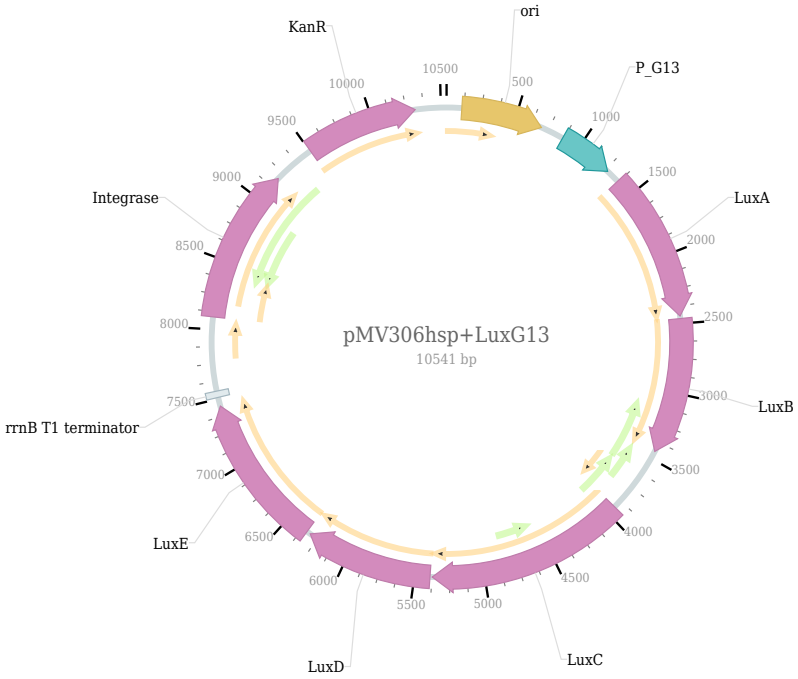
pMV306hsp+LuxG13

Vector ID	V017191
Antibiotic Resistance	Kanamycin
Length	10541 bp
Vector Type	Protein expression
Host	E. coli

Product Information

Replication Origin	ori
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pMV306hsp+LuxG13 is an integrating mycobacterial plasmid carrying the full luxABCDE operon for self-luminescence. It inserts the strong P_G13 promoter upstream of luxC to boost substrate synthesis and raise luminescent signal 6-fold. This kanamycin-resistant vector stably generates auto-bioluminescent M. smegmatis and M. tuberculosis without external substrate supplementation. It enables non-invasive in vivo lung bioluminescence imaging and high-throughput anti-mycobacterial drug screening.

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 ℃.