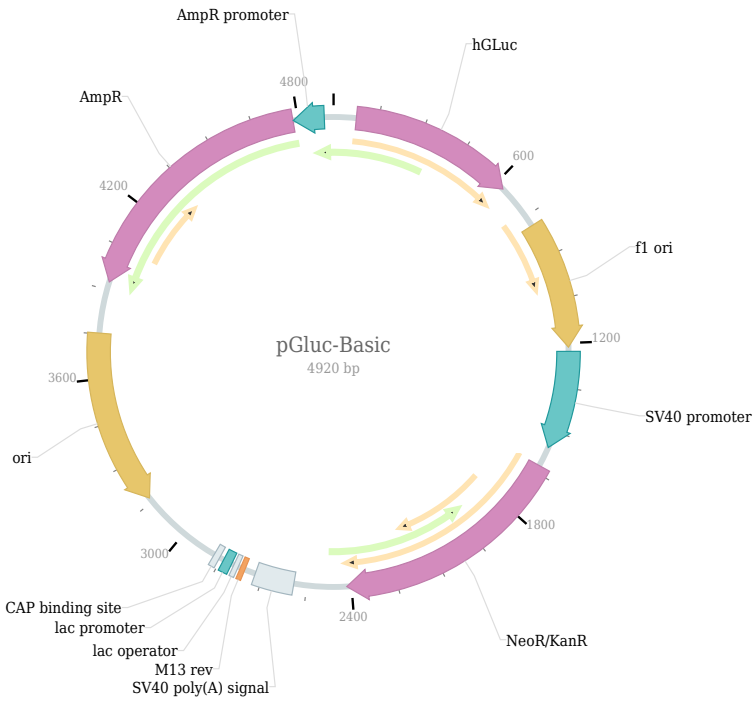
pGluc-Basic

Vector ID	V007688
Antibiotic Resistance	Ampicillin
Length	4920 bp
Vector Type	Promoter enhancer reporter vector

Product Information

Replication Origin	ori
Cloning Method	Enzyme digestion and ligation
5' Primer	5′ d(GGGGTTCCGCGCACATTTCCCCG) 3′
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pGLuc-Basic is a plasmid cloning vector capable both of replication in E. coli and stable transfection of mammalian cells. It is designed for the cloning of promoter sequences and measurement of their transcription activity using the Gaussia Luciferase Assay Kit (NEB #E3300).In E. coli, it replicates using the pMB1 origin of replication from pBR322 (although the rop gene is missing) and carries the bla (ApR) marker for selection with ampicillin. It also carries the nptII (NmR) marker under control of an SV40 promoter; thus, following transfection into mammalian cells, it can be used to form stable cell lines by selection with geneticin (G418).The multiple cloning site (MCS) is positioned immediately upstream of a promoterless reporter gene, GLuc (the humanized coding sequence for the secreted Gaussia princeps luciferase) (1), which is followed by a synthetic polyadenylation (polyA) sequence (not shown). Thus, in mammalian cells the transcriptional activity of promoter sequences cloned into the MCS can be assessed by measuring GLuc activity in the culture medium.

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 ℃.