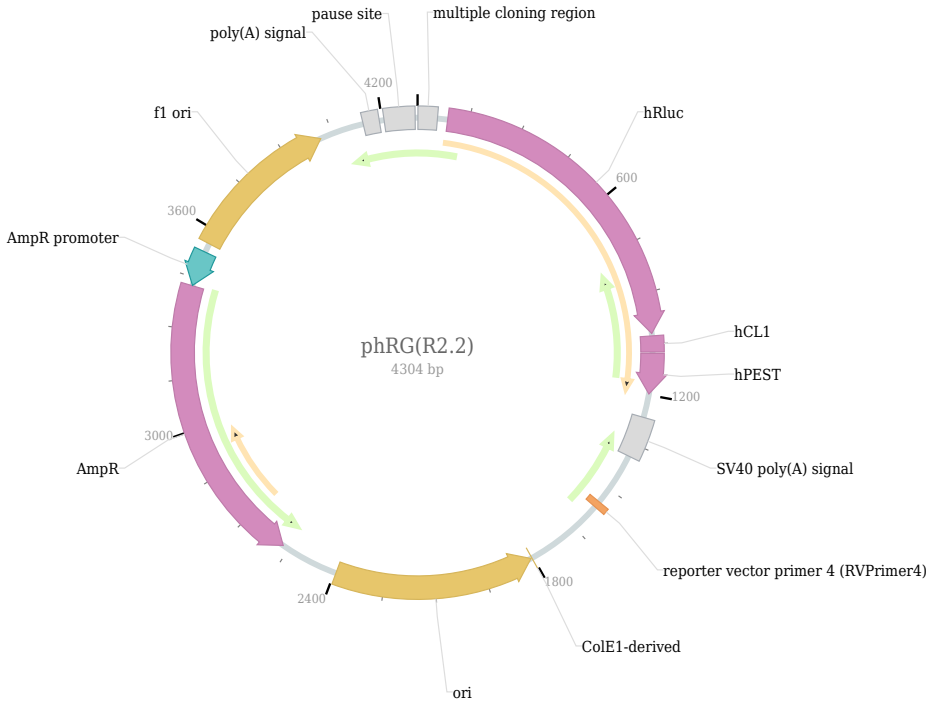
phRG(R2.2)

Vector ID	V005502
Antibiotic Resistance	Ampicillin
Length	4304 bp
Vector Type	Reporter vector

Product Information

Replication Origin	ori
Source/Author	Almond BD, Chauvin F, Kenefick KB.
Growth Strain(s)	Top10
Comment	phRG(R2.2) is a rapid-response mammalian reporter vector developed by Promega. It contains humanized Renilla luciferase gene hRluc fused with hCL1 and hPEST degron sequences, which confer rapid protein turnover to capture transient transcriptional dynamics. A multiple cloning region (MCR) upstream of hRluc enables insertion of target promoters or regulatory elements. The vector carries ampicillin resistance (AmpR) and ColE1 origin for propagation in E. coli, with f1 ori for single-stranded DNA production. SV40 poly(A) signal and RNA polymerase II pause/poly(A) elements are included for proper mRNA processing and low background transcription in mammalian cells.

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 ℃.