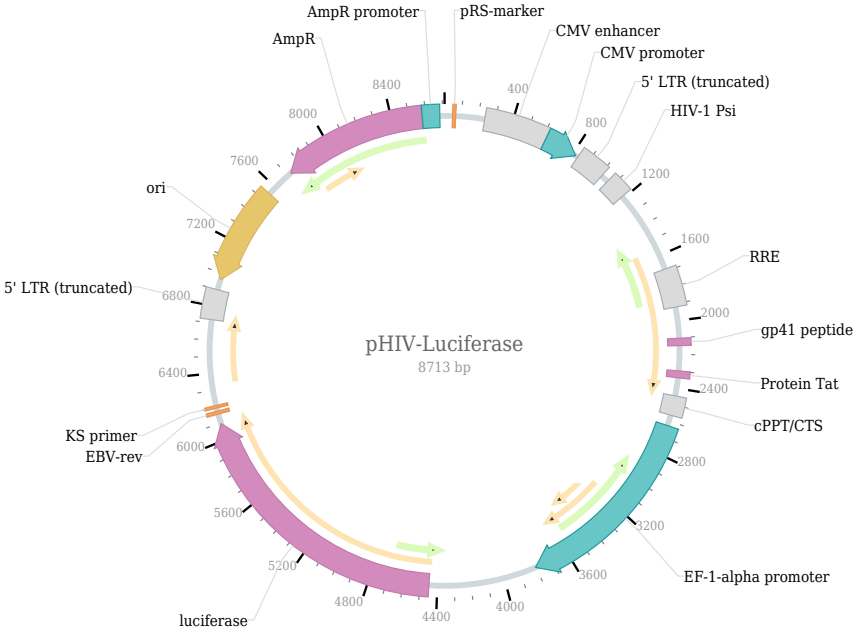
pHIV-Luciferase

Vector ID	V001141
Antibiotic Resistance	Ampicillin
Length	8713 bp
Vector Type	Mammalian Expression, Lentiviral

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	EF-1α
5' Primer	5'-TGGAATTTGCCCTTTTTGAG-3'
3' Primer	5'-AGGAACTGCTTCCTTCACGA-3'
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pHIV-LUC is a specialized plasmid designed for molecular biology research applications. It features a unique construction where sequences from the HIV enhancer (-2453 to +80) are linked to the firefly luciferase gene. This design enables the plasmid to be used in a variety of assays to study gene expression and transcriptional regulation. When transfected into cells, it allows for the quantification of luciferase activity, which serves as an indicator of transcriptional activity. It is a valuable tool in investigations related to DNA repair mechanisms and the effects of various factors on gene expression. In different experimental setups, changes in luciferase activity can provide insights into the functionality of the transfected cells and the impact of different treatments or conditions on the transcriptional machinery.

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 ℃.