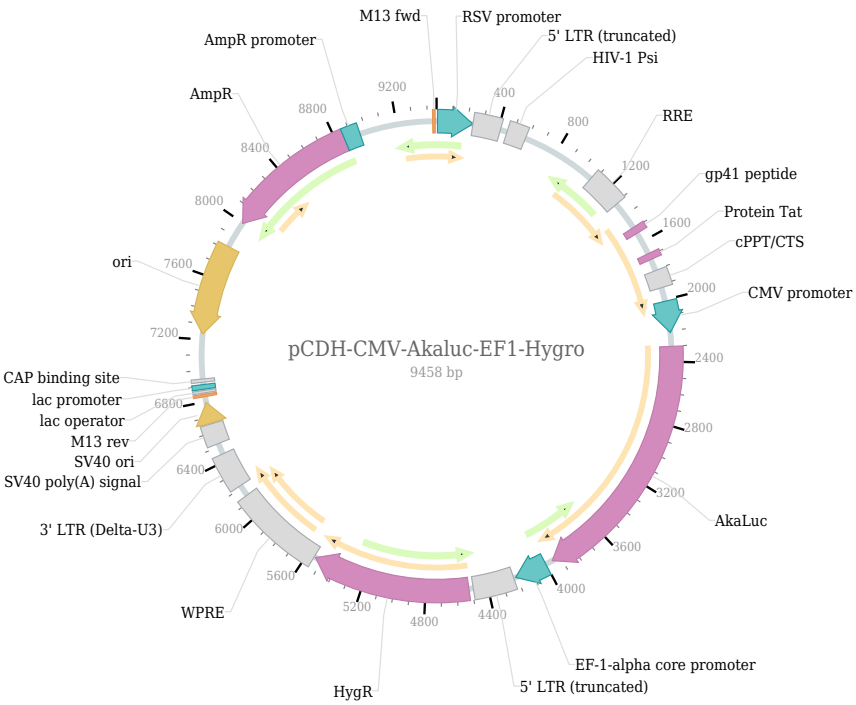
pCDH-CMV-Akaluc-EF1-Hygro

Vector ID	V013207
Antibiotic Resistance	Ampicillin
Length	9458 bp
Vector Type	Protein expression
Host	Mammalian cells, Lentivirus

Product Information

Replication Origin	ori
Selection Marker	Hyg
Promoter	EF-1α core
Growth Strain(s)	Stbl3
Growth Temperature	37℃
Comment	pCDH-CMV-Akaluc-EF1-Hygro is an SBI lentiviral vector with CMV promoter driving Akaluc luciferase and EF1a-driven hygromycin selection, for near-infrared bioluminescence imaging in vivo. AkaLuc is an engineered firefly luciferase with 28 amino acid mutations, catalyzing its substrate AkaLumine to emit near-infrared light (peak ~670 nm); this red-shifted luminescence penetrates deep animal tissues far better than classic green bioluminescence, delivering up to 1000-fold stronger in vivo signals for single-cell and brain imaging.

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 ℃.