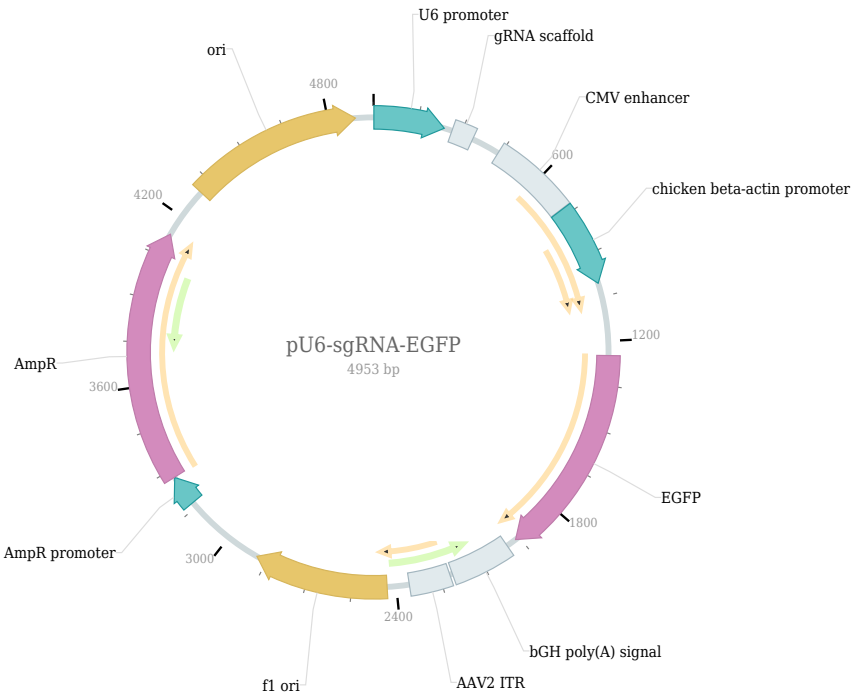
pU6-sgRNA-EGFP

Vector ID	V015154
Antibiotic Resistance	Ampicillin
Length	4953 bp
Vector Type	Gene knockout
Host	Mammalian cells

Product Information

Replication Origin	ori
Copy Number	High copy number
Promoter	CBh
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The plasmid vector pU6-sgRNA-EGFP is a CRISPR/Cas9 genome editing tool designed for mammalian cells. It features a U6 promoter driving the expression of a single-guide RNA (sgRNA) to target specific genes. The vector also contains an enhanced green fluorescent protein (EGFP) reporter, which allows for visual monitoring of transfection efficiency and sorting of successfully edited cells. It typically includes selection markers, such as puromycin or hygromycin resistance, for stable cell line generation. This all-in-one system enables efficient gene knockout and is suitable for both direct plasmid transfection and lentiviral-mediated gene delivery.

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 ℃.