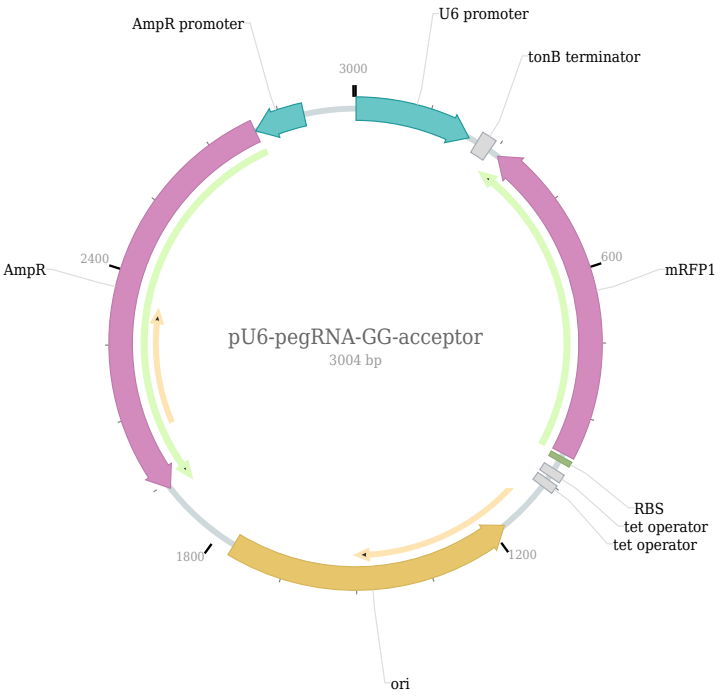
pU6-pegRNA-GG-acceptor

Vector ID	V007253
Antibiotic Resistance	Ampicillin
Length	3004 bp
Vector Type	Mammalian Expression

Product Information

Replication Origin	ori
Source/Author	David Liu Lab
Copy Number	High Copy
Promoter	U6
Cloning Method	Ligation Independent Cloning
5' Primer	GACTATCATATGCTTACCGT
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pU6-pegRNA-GG-acceptor is a mammalian expression plasmid designed for cloning prime editing guide RNAs (pegRNAs) via Golden Gate assembly. It features a human U6 promoter for pegRNA expression, an ampicillin resistance gene for bacterial selection, and a high-copy pUC origin. The vector is specifically engineered with BsaI restriction sites to facilitate the insertion of pegRNA sequences, which consist of a spacer, scaffold, and a 3' extension containing the reverse transcriptase template and primer binding site. It is a fundamental tool in prime editing experiments, often used alongside editors like PE2.

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 ℃.