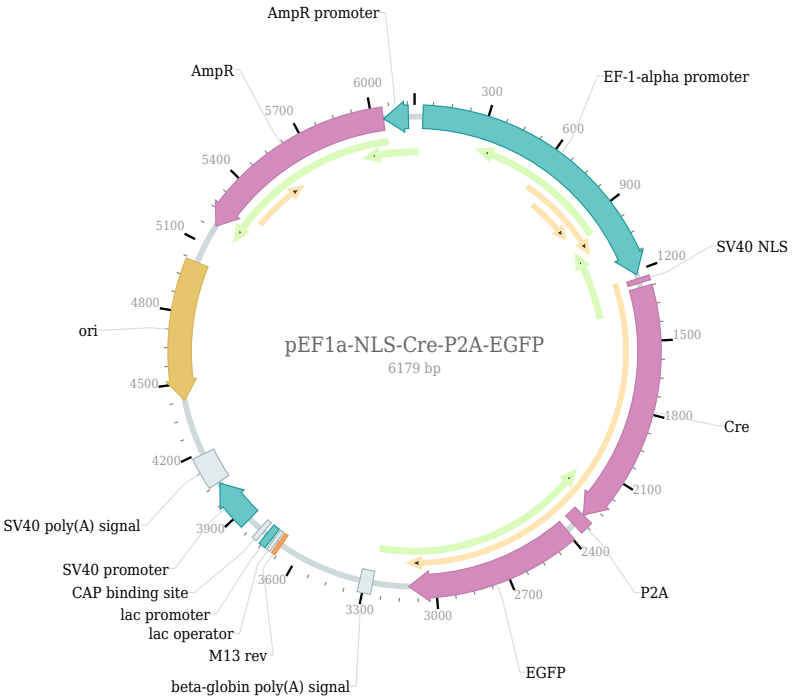
pEF1a-NLS-Cre-P2A-EGFP

Vector ID	V045638
Antibiotic Resistance	Ampicillin
Length	6179 bp
Vector Type	Gene-editing, Subcellular localization
Host	Mammalian cells

Product Information

Replication Origin	ori
Selection Marker	EGFP
Copy Number	High
Promoter	EF1a
5' Primer	EF1a-R-F
Growth Strain(s)	DH5a
Growth Temperature	37℃
Expression Method	Transient
Comment	pEF1a-NLS-Cre-P2A-EGFP is designed for mammalian expression of Cre recombinase with a green fluorescent readout. Key features include the EF-1α promoter for strong constitutive expression, an NLS (Nuclear Localization Signal) for targeting the Cre protein to the nucleus, and a P2A ribosomal skipping sequence. The P2A allows separate translation of the EGFP reporter, enabling visualization of transfected or transduced cells without directly fusing GFP to the Cre enzyme.

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 ℃.