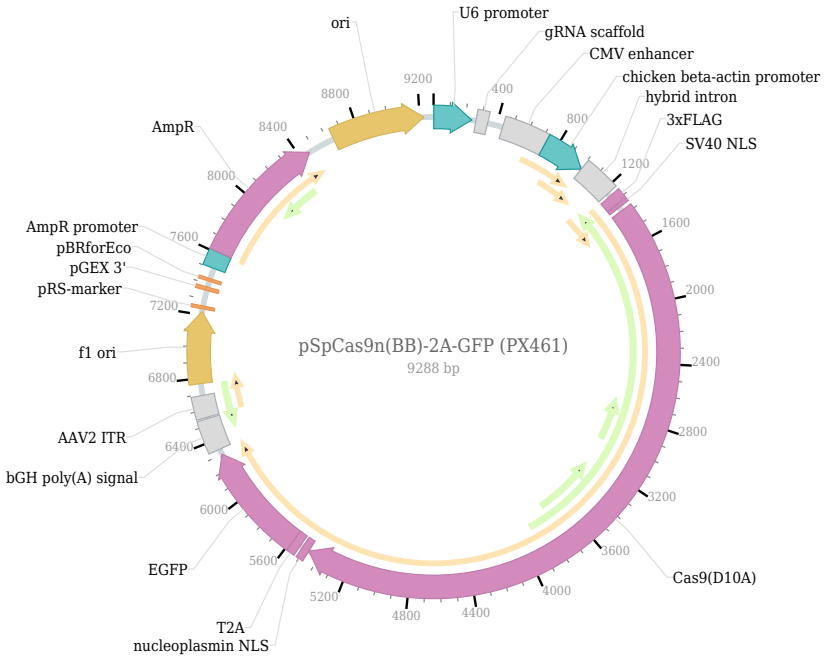
pSpCas9n(BB)-2A-GFP (PX461)

Vector ID	V005927
Antibiotic Resistance	Ampicillin
Length	9288 bp
Vector Type	Mammalian Expression, CRISPR

Product Information

Replication Origin	ori
Promoter	CBh
Cloning Method	Restriction Enzyme
5' Primer	TTTATGGCGAGGCGGCGG
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	pSpCas9n(BB)-2A-GFP (PX461) is an all-in-one CRISPR nickase plasmid developed by Zhang lab. It expresses D10A SpCas9 nickase fused with EGFP via T2A peptide for fluorescent sorting of transfected cells. Its U6-BbsI backbone enables straightforward sgRNA insertion for double-nicking editing to reduce off-target lesions. This vector supports both NHEJ knockout and precise HDR modification in mammalian cell lines.

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 ℃.