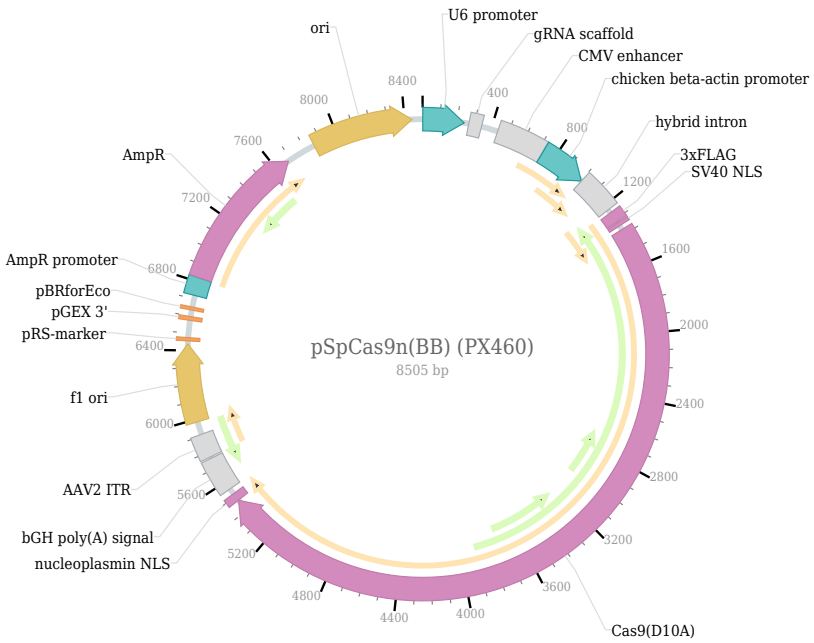
pSpCas9n(BB) (PX460)

Vector ID	V010101
Antibiotic Resistance	Ampicillin
Length	8505 bp
Vector Type	Mammalian Expression, CRISPR

Product Information

Replication Origin	ori
Promoter	CBh
Cloning Method	Restriction Enzyme
5' Primer	TTTATGGCGAGGCGGCGG
Growth Strain(s)	Stbl3
Growth Temperature	37℃
Comment	pSpCas9n(BB) (PX460) is an all-in-one mammalian CRISPR plasmid created by Feng Zhang's lab. It carries D10A-mutated SpCas9 nickase that only generates single-strand DNA nicks instead of double-strand breaks. Equipped with U6 promoter and BbsI cloning sites, it allows easy insertion of custom sgRNA sequences for co-expression with Cas9n. Applied in paired double-nicking strategy to cut off-target mutations and boost editing precision, it also supports homology-directed repair (HDR) for precise genome modification.

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 ℃.