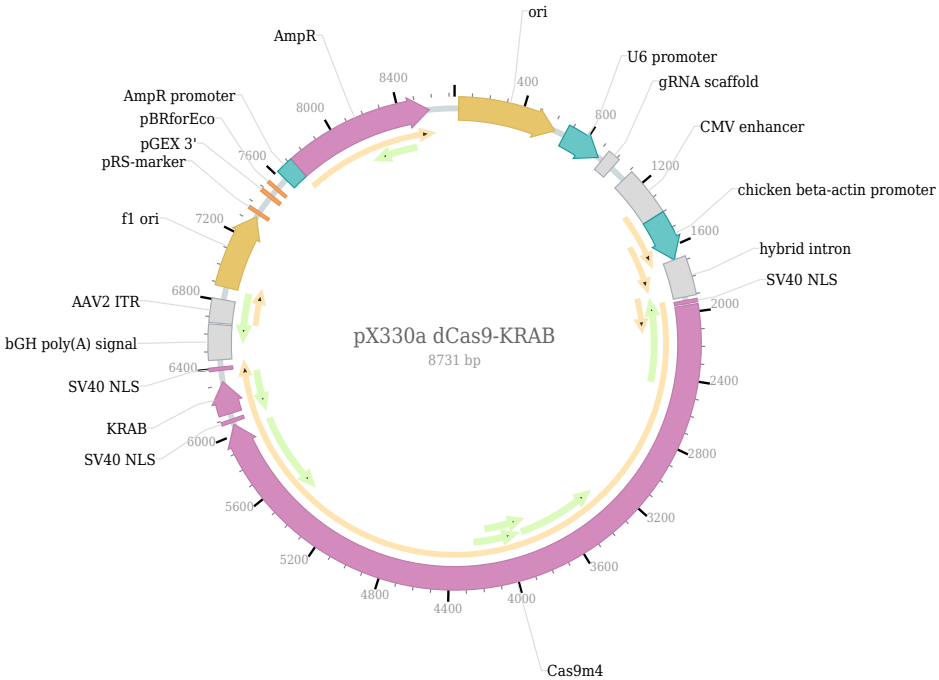
pX330a dCas9-KRAB

Vector ID	V012626
Antibiotic Resistance	Ampicillin
Length	8731 bp
Vector Type	Mammalian Expression, CRISPR

Product Information

Replication Origin	ori
Copy Number	High Copy
Promoter	CBh
Cloning Method	Gibson Cloning
5' Primer	tctgactgaccgcgttactc
3' Primer	aggaaaggacagtgggagtg
Growth Strain(s)	DH10B
Comment	pX330a dCas9-KRAB is a CRISPR epigenome editing plasmid built from pX330 backbone via In-Fusion cloning of KRAB fragment into linearized pX330-dCas9-LSD1 vector. It ubiquitously expresses catalytically inactive dCas9 fused to KRAB repressor domain under chicken CAG promoter, alongside a U6 sgRNA expression cassette. Guided by tiled sgRNAs, the fusion protein condenses target enhancer chromatin to suppress downstream gene transcription without DNA double-strand breaks. This vector is optimized for in vivo targeted enhancer silencing in early chicken embryos to study neural crest cis-regulatory networks.

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 ℃.